

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT ☒

<b>APPLICATION FOR PERMIT TO DRILL</b>				<b>1. WELL NAME and NUMBER</b> BLC 11-02-11-15		
<b>2. TYPE OF WORK</b> DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>				<b>3. FIELD OR WILDCAT</b> UNDESIGNATED		
<b>4. TYPE OF WELL</b> Gas Well <input type="checkbox"/> Coalbed Methane Well: NO <input type="checkbox"/>				<b>5. UNIT or COMMUNITIZATION AGREEMENT NAME</b>		
<b>6. NAME OF OPERATOR</b> XTO ENERGY INC				<b>7. OPERATOR PHONE</b> 505 333-3159		
<b>8. ADDRESS OF OPERATOR</b> 382 Road 3100, Aztec, NM, 87410				<b>9. OPERATOR E-MAIL</b> kyla_vaughan@xtoenergy.com		
<b>10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)</b> ML-51638		<b>11. MINERAL OWNERSHIP</b> FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>		<b>12. SURFACE OWNERSHIP</b> FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>		
<b>13. NAME OF SURFACE OWNER (if box 12 = 'fee')</b>				<b>14. SURFACE OWNER PHONE (if box 12 = 'fee')</b>		
<b>15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')</b>				<b>16. SURFACE OWNER E-MAIL (if box 12 = 'fee')</b>		
<b>17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')</b>		<b>18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS</b> YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>		<b>19. SLANT</b> VERTICAL <input checked="" type="checkbox"/> DIRECTIONAL <input type="checkbox"/> HORIZONTAL <input type="checkbox"/>		
<b>20. LOCATION OF WELL</b>	<b>FOOTAGES</b>	<b>QTR-QTR</b>	<b>SECTION</b>	<b>TOWNSHIP</b>	<b>RANGE</b>	<b>MERIDIAN</b>
<b>LOCATION AT SURFACE</b>	2031 FSL 1975 FWL	NESW	2	11.0 S	15.0 E	S
<b>Top of Uppermost Producing Zone</b>	2031 FSL 1975 FWL	NESW	2	11.0 S	15.0 E	S
<b>At Total Depth</b>	2031 FSL 1975 FWL	NESW	2	11.0 S	15.0 E	S
<b>21. COUNTY</b> DUCHESE		<b>22. DISTANCE TO NEAREST LEASE LINE (Feet)</b> 1975		<b>23. NUMBER OF ACRES IN DRILLING UNIT</b> 52008		
		<b>25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)</b> 15308		<b>26. PROPOSED DEPTH</b> MD: 16830 TVD: 16830		
<b>27. ELEVATION - GROUND LEVEL</b> 7024		<b>28. BOND NUMBER</b> 104312762		<b>29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE</b> Commercial Water		
<b>ATTACHMENTS</b>						
<b>VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES</b>						
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER			<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN			
<input type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)			<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER			
<input type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)			<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP			
<b>NAME</b> Eden Fine		<b>TITLE</b> Permitting Clerk		<b>PHONE</b> 505 333-3664		
<b>SIGNATURE</b>		<b>DATE</b> 05/18/2010		<b>EMAIL</b> eden_fine@xtoenergy.com		
<b>API NUMBER ASSIGNED</b> 43013503690000		<b>APPROVAL</b>  Permit Manager				

Proposed Hole, Casing, and Cement						
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Cond	17.5	13.375	0	500		
Pipe	Grade	Length	Weight			
	Grade H-40 ST&C	500	48.0			

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Proposed Hole, Casing, and Cement						
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Surf	12.5	9.625	0	5000		
Pipe	Grade	Length	Weight			
	Grade N-80 LT&C	5000	40.0			

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Proposed Hole, Casing, and Cement						
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Prod	8.125	7	0	16830		
Pipe	Grade	Length	Weight			
	Grade P-110 LT&C	16830	32.0			

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**XTO ENERGY INC.**  
**Bad Land Cliffs 11-02-11-15**  
**APD Data**  
**May 11, 2010**

**Location:** 2031' FSL & 1975' FWL, Sec. 02, T11S, R15E      **County:** Duchesne      **State:** Utah

**GREATEST PROJECTED TD:** 16,830'  
**APPROX GR ELEV:** 7024'

**OBJECTIVE:** Mancos Shale  
**Est KB ELEV:** 7048' (24' AGL)

**1. MUD PROGRAM:**

INTERVAL	Surface – 500'	500' to 5000'	5000' to 16,830'
HOLE SIZE	17.5"	12.25"	8.75"
MUD TYPE	Air-Mist/Mud	FW/Spud Mud <sup>1</sup>	KCl Based LSND / Gel Chemical
WEIGHT	8.4 Max	8.4	8.9-12.5
VISCOSITY	NC	NC	28-40
WATER LOSS	NC	NC	8-15

Remarks: Use fibrous materials as needed to control seepage and lost circulation. Pump high viscosity sweeps as needed for hole cleaning. Raise viscosity at TD for logging. Reduce viscosity after logging for cementing purposes. Sufficient mud materials will be stored on location to maintain well control and combat lost circulation problems that might reasonably be expected.

**2. CASING PROGRAM:**

**Conductor Casing:** 13.375" casing to be set at ±500' in a 17-1/2" hole filled with 8.4 ppg mud.

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'-500'	500'	48.0#	H-40	ST&C	770	1730	322	12.715	12.559	3.53	7.93	16.1

**Surface Casing:** 9.625" casing to be set at ±5000' in a 12-1/4" hole filled with 8.4 ppg mud

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'-5000'	5000'	40.0#	N-80	LT&C	3090	5750	727	8.835	*8.75	1.41	1.44	3.64

\*Special Drift Pipe - not API Drift

Collapse-Full Evacuation, Burst – Frac Grad. @ 5000' TVD = 15.4 ppg, and Tensile without Buoyancy

**Production Casing:** 7" Casing to be set at TD (±16,830' MD/TVD) in 8.125" hole filled w/ 12.5 ppg mud.

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0-16,830'	16830'	32.0#	P-110	LT&C	10760	12460	1025	6.094	5.969	*1.16	1.46	1.90

Collapse based on full evacuation with 0.1 psi/ft gas gradient back up internally.

\*Note: 7" Casing will be filled with +/- 12.5 ppg mud while running the string into the wellbore.

Burst based on anticipated pore pressure @ total depth less 0.1 psi/ft gas gradient to surface and 8.33 ppg

Mud Weight Equivalent back up behind pipe.

Tensile based on air weight only – No Buoyancy Factor

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**3. WELLHEAD:**

- A. Casing Head: SH2 Multi-Bowl (or equivalent), 13-5/8" nominal, 10,000 psig WP with 13-3/8" Slip-on-Weld Bottom, and 13-5/8", 10,000 psig WP API Top Flange. 9-5/8" to be landed in lower Multi-Bowl with mandrel or slips. 7" casing to be landed in upper section of Multi-Bowl with mandrel or slips.
- B. Tubing Head: Wood Group Type 'T' (or equivalent), 7-1/16" nominal, 15,000 psig WP, 13-3/8" 10,000 psig WP Bottom Flange, with 7-1/16" 15,000 psig WP Top Flange.

**4. CEMENT PROGRAM (Slurry design may change slightly based on wellbore conditions):**

- A. Conductor: 13-3/8", 48.0#, H-40 (or Equiv), ST&C casing to be set at  $\pm 5,00'$  in 17-1/2" hole.

450 sx of Type V cement (or equivalent) typically containing accelerator and LCM.

*Slurry includes 50% excess of calculated annular volume to 500'.*

- B. Surface: 9-5/8", 40.0#, N-80 (or Equiv), LT&C casing to be set at  $\pm 5,000'$  in 12-1/4" hole.

LEAD:

$\pm 760$  sx of Light Premium Plus Blend. (Type V/Poz/Gel) or equivalent, with thixotropic, fluid loss, accelerator, & LCM mixed at 11.5 ppg, 2.71 ft<sup>3</sup>/sk, 15.94 gal wtr/sk.

TAIL:

220 sx Class G or equivalent cement with retarding and LCM additives mixed at 15.8 ppg, 1.15 cuft/sx, 4.96 gal wtr/sk.

*Total estimated slurry volume with 50% excess for the 9-5/8" intermediate casing is 2295 ft<sup>3</sup>.*

- C. Production: 7", 32.0#, P-110 (or Equiv), LT&C casing to be set at  $\pm 16,830'$  in 8-3/4" hole.

LEAD:

$\pm 1005$  sx of Light Premium Plus Blend. (Type V/Poz/Gel) or equivalent, with light weight additive, fluid loss, retarder, & LCM mixed at 12.5 ppg, 1.96 ft<sup>3</sup>/sk, 10.55 gal wtr/sk.

TAIL:

$\pm 760$  sx 50/50 Poz Premium or equivalent cement with light weight and bonding additives, temperature retrogression and gas migration agents, fluid loss additives mixed at 14.3 ppg, 1.51 cuft/sx, and  $\pm 6.56$  gal wtr/sk.

*Total estimated slurry volume with 30% excess for the 7" intermediate casing is 3113 ft<sup>3</sup>.*

**5. LOGGING PROGRAM:**

Mud Logger: Plot drill times from surface casing to T. Depth in conjunction with Gas Chromatograph readings.  
Catch 10' – 20' samples from surface casing to total depth.

Electric Logging Program: Hi Resolution Laterolog Array from surface casing to TD.  
Compensated Neutron/Lithodensity/Pe/Caliper log from surface casing to TD.  
Gamma Ray Log from Surface Casing to TD.

Possible Specialty Logs: Formation Imaging Log – selected intervals  
Dipole Sonic Log – selected intervals  
ECS/RSWC – selected intervals

Run Gamma Ray from Surface (0') to Total Depth.



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<b>FORMATION</b>	<b>Depth (TVD)</b>	<b>Subsea</b>
Green River	1213	5836
Mahogany Bench Mbr	2013	5036
Wasatch Tongue	4072	2977
Green River Tongue	4583	2466
Wasatch	4714	2335
Mesaverde	8951	-1002
Castlegate	11542	-4493
Blackhawk	11813	-4764
Mancos	12599	-5550
Mancos 'B'	12822	-5773
Dakota	16770	-9721
<b>TD</b>	<b>16830</b>	

**Note: The Uintah Formation Outcrops @ Surface****7. ANTICIPATED OIL, GAS, & WATER ZONES:**

A.

<b>Formation</b>	<b>Expected Fluids</b>	<b>TV Depth Top</b>
Wasatch Tongue	Oil/Gas/Water	4072
Wasatch	Gas/Water	4714
Mesaverde	Gas/Water	8951
Castlegate	Gas/Water	11542
Blackhawk	Gas/Water	11813
Mancos	Gas/Water	12599
Mancos 'B'	Gas/Water	12822
Dakota	Gas/Water	16770

- B. Appropriately weighted mud will be used to isolate potential gas, oil, and water zones until such time as casing can be cemented into place for zonal isolation. No known fresh water zones will be penetrated (but if flow is encountered - will be promptly reported to the UT DOGM). The gas bearing zones may contain in-situ water. No known mineral zones will be penetrated.
- C. There are no known potential sources of H<sub>2</sub>S.
- D. The bottomhole pressure is anticipated to be approximately 10,064 psi (from nearby offset well Gasco GCS 23-16-11-15).
- E. The Maximum Anticipated Surface Pressure (MASP) is calculated at 8385 psi assuming a dry column of gas (0.1 psi/ft) back to surface.

**8. BOP EQUIPMENT:**

Conductor (17-1/2" hole): A 20" diverter system will be utilized and installed on top of the 20" structural pipe set at  $\pm 40'$ . The diverter system will provide a means of well control consistent with the depth of the 20" structural pipe during the air drilling phase of this section. The bloopie line will be approximately 100' in length, and will have straight runs if possible or targeted "Tees" if conditions dictate (with verbal

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approval solicited from the UT DOGM prior to proceeding) to divert any surface flows safely away from the rig floor and personnel. An automatic spark-type ignitor will be fixed to the end of the blooie line and set to provide a continuous spark to ignite and burn any producted hydrocarbons and/or gasses. XTO is not aware of any shallow gas hazard events in the Unitah outcroppings in this area.

Surface Hole (12-1/4") will be drilled with a 10,000 psi BOP Stack.

Production hole will be drilled with a 10,000 psi BOP Stack.

Minimum specifications for pressure control equipment are as follows:

Annular Type: 13-5/8" 5,000 psi WP

Ram Type: 13-5/8" Hydraulic Double Ram with annular, 10,000 psi w.p.

Ram Type: 13-5/8" Hydraulic Single Ram, 10,000 psi w.p.

Ram type preventers and associated equipment shall be tested to stack working pressure if isolated by test plug or to 70% of internal yield pressure of casing. Pressure shall be maintained for at least 10 minutes or until requirements of test are met, whichever is longer. If a test plug is utilized, no bleed-off pressure is acceptable. For a test not utilizing a test plug, if a decline in pressure of more than 10% in 30 minutes occurs, the test shall be considered to have failed. Valve on casing head below test plug shall be open during test of BOP stack.

Annular type preventers shall be tested to 50% of rated working pressure. Pressure shall be maintained at least 10 minutes or until provisions of test are met, whichever is longer.

As a minimum, the above test shall be performed:

- a. when initially installed:
- b. whenever any seal subject to test pressure is broken
- c. following related repairs
- d. at 30 day intervals.

Valves shall be tested from working pressure side during BOPE tests with all down stream valves open.

When testing the kill line valve(s) shall be held open or the ball removed.

Annular preventers shall be functionally operated at least weekly.

Pipe and blind rams shall be activated each trip; however, this function need not be performed more than once a day.

A BOPE pit level drill shall be conducted weekly for each drilling crew.

The BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No.2 for equipment and testing requirements, procedures, etc., and individual components shall be operable as designed. Chart recorders shall be used for all pressure tests. Pressure tests shall apply to all related well control equipment.

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BOP systems shall be consistent with API RP53. Pressure tests will be conducted before drilling out from under casing strings which have been set and cemented in place. Test pressures for BOP equipment are as follows:

Annular BOP – 2,500 psi  
Ram type BOP – 10,000 psi  
Kill line valves – 10,000 psi  
Choke line valves and choke manifold valves – 10,000 psi  
Chokes – 10,000 psi  
Casing, casinghead & weld -- 1500 psi  
Upper kelly cock and safety valve – 10,000 psi  
Dart valve – 10,000 psi

Blowout preventer controls will be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to ensure good mechanical working order, and this inspection will be recorded on the daily drilling report. Preventers will be pressure tested before drilling casing cement plugs.

The UT DOGM in Salt Lake City, UT shall be notified, at least 24 hours prior to initiating the pressure test, in order to be given the opportunity to have one of it's representatives witness the pressure testing.

- a. The size and rating of the BOP stack is shown on the attached diagram.
- b. A choke line and a kill line are to be properly installed.
- c. The accumulator system shall have a pressure capacity to provide for repeated operation of hydraulic preventers.
- d. Drill string safety valve(s), to fit all tools in the drill string, are to be maintained on the rig floor while drilling operations are in progress.
- e. See attached BOP (Figure 1) & Choke manifold (Figure 2) diagrams.

9. **COMPANY PERSONNEL:**

<b><u>Name</u></b>	<b><u>Title</u></b>	<b><u>Office Phone</u></b>	<b><u>Home Phone</u></b>
Justin Niederhofer	Drilling Engineer	505-333-3199	505-320-0158
Bobby Jackson	Drilling Superintendent	505-333-3224	505-486-4706
Brent Martin	Drilling Manager	505-333-3110	505-320-4074
Jeff Jackson	Project Geologist	817-885-2800	



## SURFACE USE PLAN

**XTO Energy Inc.  
BLC 11-02-11-15  
2031' FSL x 1975' FWL  
Section 02, T11S, R15E  
UINTAH COUNTY, UTAH**

### TWELVE POINT SURFACE USE PLAN

The dirt contractor will be provided with an approved copy of the surface use plan of operations before initiating construction.

1. Existing Roads:

- a. Proposed route to location is shown on the USGS quadrangle map:  
**See Exhibit "A".**
- b. **The Proposed Well Location is approximately 27.05 miles from Myton, UT**
- c. Location of proposed well in relation to town or other reference point:  
**Proceed in a southwesterly direction from Myton, Utah along U.S. Highway 40 Approximately 1.5 miles to the junction of this road and sand wash road to the south; turn left and proceed in a southerly, then southwesterly, then southerly direction approximately 1.7 miles to the junction of this road and the 9 mile road to the southwest; turn right and proceed in a southwesterly direction approximately 23.6 miles to the junction of this road and an existing road the southeast; turn left and proceed in a southeasterly direction approximately 1.1 miles to the beginning of the proposed access road for the BLC #13-02-11-15 to the northeast; follow road flags in a northeasterly direction approximately 0.5 miles to the proposed location.**
- d. All existing roads within 1 mile of the drill site are shown on Exhibit "A". **If necessary, all existing roads that will be used for access to the well location will be maintained to their current condition or better unless SITLA approval or consent is given to upgrade the existing road(s).**

2. Planned Access Roads:

- a. Location (centerline): **Starting from a point along an existing road in the SW/4 of Sec 1, T11S, R15E.**
- b. Length of new access to be constructed: **Approx 2,840 feet of new access will be constructed in order to gain safe access to the well pad. See Exhibit "B"**
- c. Length of existing roads to be upgraded: **None**
- d. Maximum total disturbed width: **Typically both existing roads and new access roads require up to 40' of disturbed width in order to obtain a 20' driving surface. If both the road and pipeline are capable of sharing the**

**ROW, then only 50' of disturbed width may be needed.**

- e. Maximum travel surface width: **25' or less**
  - f. Maximum grades: **Maximum grades will not exceed 10% after construction.**
  - g. Turnouts: **No turnouts are planned at this time. Turnouts may be specified in the approved APD.**
  - h. Surface materials: **Only native materials will be used during construction. If necessary, gravel or rock may be purchased and used to improve road conditions and travel.**
  - i. Drainage (crowning, ditching, culverts, etc): **Roads will be crowned and bar ditches will be located along either side. 18-24" dia CMP culverts will be installed as necessary.**
  - j. Cattle guards: **No cattle guards are planned at this time. Cattle guards will be specified in the stipulations if necessary.**
  - k. Vehicle operators will obey posted speed restrictions and observe safe speeds commensurate with road and weather conditions.
  - l. Length of new and/or existing roads which lie outside the lease or unit boundary for which a BLM/state/fee right-of-way is required: **None**
  - m. Other: **See general information below.**
  - n. Surface disturbance and vehicular travel will be limited to the approved location and access road only. Any additional surface area needed must be approved by BLM in advance.
  - o. All access roads and surface disturbance will conform to the standards outlines in the BLM and Forest Service publication: Surface Operating Standards for Oil and Gas Exploration and Development. (1989).
  - p. The operator will be responsible for all maintenance of the access road including drainage structures.
3. Location of Existing Wells within a one mile radius of the proposed well:  
**"See Exhibit C"**
4. Location of Production Facilities:
- a. On-site facilities: **Typical on-site facilities will consist of a wellhead, flow lines (typ 3" dia.), artificial lifting system (if necessary), wellhead compression (if necessary), gas/oil/water separator (3 phase), gas measurement and water measurement equipment, and a heated enclosure/building for weather and environmental protection. The tank battery will typically be constructed and surrounded by a berm of sufficient capacity to contain 1½ times the storage capacity of the largest tank(s). The tanks typically necessary for the production of this well will be 1 – 300 bbl steel, above ground tank for oil/condensate and 1 – 300 bbl steel, tank for produced water. All loading lines and valves for these tanks will be placed inside the berm surrounding the tank battery.**



**All oil/condensate production and measurement shall conform to the provisions of 43 CFR § 3162.7 and Onshore Oil and Gas Order No. 4, if applicable. Other on-site equipment and system may include methanol injection and winter weather protection.**

All permanent (in place for six months or longer) structures constructed or installed on the well site location will be painted a flat, nonreflective color to match the standard environmental colors, as specified by the COA's in the APD. All facilities will be painted within six months of installation. Facilities required by comply with the Occupational Safety and Health Act (OSHA) may be excluded.

- b. Off-site facilities: **N/A**
- c. Pipelines: **The well will be produced into a buried 10" or less steel gas pipeline and transported to either an existing pipeline ROW (3<sup>rd</sup> party transporter) or gas gathering facility. See Exhibit "D" for the proposed pipeline route.**
- d. Power lines: **There are no plans to include power lines in this application. In the event power is required, a ROW application will be submitted to the appropriate agencies.**

5. Location and Type of Water Supply:

**Water will be purchased from a commercial water source and trucked via third party to the location over approved access roads.**

6. Source of Construction Material:

No construction material will be removed from SITLA, Federal, or Tribal lands

If any gravel is used it will be obtained from a State approved gravel pit.

Pad construction material will be obtained from (if the material source is federally owned, a map will be included showing the location of the material):

**All construction material will be purchased from private landowners and or from a commercial gravel/materials pit. All material will be trucked to location via third party trucking using only approved access roads.**

The use of materials under BLM jurisdiction will conform to 43 CFR § 3610.2-3, if applicable.

7. Methods of Handling Waste Disposal:

Describe the methods and locations proposed for safe containment and disposal of waste material, e.g. cuttings, produced water, garbage, sewage, chemicals, etc.

**The reserve pits will typically be lined with a synthetic material, ±20 mils in thickness. The reserve pits shall be located in cut material, with at least 50% of the pit volume being below original ground level. Three sides of the reserve pits will be fenced before drilling starts. The fourth side will be fenced as soon as drilling is completed, and shall remain until the pits are dry. Appropriate precautions, such as bird netting or bird balls will be used in order to prevent access and mortality of birds and other animals.**



Muds and cuttings will be solidified in place and buried. All precautions will be used as to minimize damage done to the pit liner while mixing is taking place.

Trash must be contained in a trash cage and hauled away to an approved disposal site as necessary but no later than at the completion of drilling operations.

Sewage from trailers and chemical portable toilets will be removed on a regular basis by a third party contractor and disposed of at an authorized sanitary waste facility.

No chemicals subject reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completion of the well.

Any and all chemicals used during the drilling and completion of the well will be kept to a minimum and stored within the boundaries of the well pad. The third party chemical contractor will be responsible for containment and clean-up and removal of all spilled chemicals on location.

8. Ancillary Facilities: No ancillary facilities will be required during the drilling or completion of the well.
9. Well Site Layout -depict the pit, rig, cut and fill, topsoil, etc. on a plat with a scale of at least 1"=50'. See Exhibit "E".

During project construction, surface disturbance and vehicle travel shall be limited to the approved location and access routes. Any additional area needed must be approved by the State prior to use.

The operator will provide a trash cage for the collection and containment of all trash. The trash will be disposed in an authorized landfill. The location and access roads shall be kept litter free.

The pad has been staked at its maximum size; however it will be constructed smaller if possible, depending on rig availability. Should the layout change, this application will be amended and approved utilizing a sundry notice.

All surface disturbing activities, will be supervised by a qualified, responsible company representative who is aware of the terms and conditions of the APD and specifications in the approved plans.

Dust will be controlled during all phases of project implementation through the use of water or approved dust suppressants.

All cut and fill slopes will be such that stability can be maintained for the life of the activity.

Diversion ditches will be constructed as shown around the well site to prevent surface waters from entering the well site area.

The site surface will be graded to drain away from the pit to avoid pit spillage during large storm events.

Materials obtained from the construction of location, like topsoil and vegetation will be stock piled as indicated and permitted by the approved APD.

The topsoil will be stockpiled for reclamation in such a way as to prevent soil loss and contamination

**Pits will remain fenced until site cleanup.**

10. Plans for Restoration of the Surface: (Interim Reclamation and Final Reclamation)

Prior to disturbance, the topsoil will be separately removed and segregated from other materials. The topsoil depth will be decided by the State during the onsite. Topsoil will be segregated from subsoil without mixing them, based upon site specific conditions.

**Typically as specified by the approved APD.**

Topsoil along the access road will be reserved in place adjacent to the road as indicted

Within 30-45 days after completion of well, all equipment that is not necessary for production shall be removed.

The reserve pit and that portion of the location not needed for production will be reclaimed in a given time period as specified by SITLA in the approved APD.

Before any dirt work to restore the location takes place, the reserve pit must be dry and ready for burial. If necessary, any approvals needed to commence the burial operation will be obtained.

All road surfacing will be removed prior to the rehabilitation of roads, if necessary.

Reclaimed roads will have the berms and cuts reduced and will be closed to vehicle use.

All disturbed areas will be recontoured to replicate the natural slope.

The stockpiled topsoil will be evenly distributed over the disturbed area.

Prior to reseeding, all disturbed areas, including the access road will be scarified and left with a rough surface. All seed utilized will be tested prior to application to ensure BLM specifications for PLS, purity, noxious weeds, etc. have been met.

The following seed mixture will be used: **As specified in the conditions of approval.**

Prior to final abandonment of the site, all disturbed areas, including the access road, will be scarified and left with a rough surface. The site will then be seeded and/or planted as prescribed by the BLM and SITLA

11. Surface and Mineral Ownership: **Both the surface and the minerals are property of the State of Utah under management of the SITLA –State Office, 675 East 500 South, Suite 500, Salt Lake City, UT 84102-2818; 801-538-5100**

12. Other Information:

- a. SWCA has conducted a Class III archeological survey. A copy of the report will be submitted under separate cover to the appropriate agencies.
- b. SWCA has conducted a paleontological survey. A copy of the report will be submitted under separate cover to the appropriate agencies.
- c. No raptor habitat is known to exist within 1 mile of the proposed wellsite.



## XTO ENERGY, INC.

BLC #11-02-11-15

SECTION 2, T11S, R15E, S.L.B.&M.

PROCEED IN A SOUTHWESTERLY DIRECTION FROM MYTON, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 1.5 MILES TO THE JUNCTION OF THIS ROAD AND SAND WASH ROAD TO THE SOUTH; TURN LEFT AND PROCEED IN A SOUTHERLY, THEN SOUTHWESTERLY, THEN SOUTHERLY DIRECTION APPROXIMATELY 1.7 MILES TO THE JUNCTION OF THIS ROAD AND THE 9 MILE ROAD TO THE SOUTHWEST; TURN RIGHT AND PROCEED IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 23.6 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST; TURN LEFT AND PROCEED IN A SOUTHEASTERLY DIRECTION APPROXIMATELY 1.1 MILES TO THE BEGINNING OF THE PROPOSED ACCESS ROAD FOR THE BLC #13-02-11-15 TO THE NORTHEAST; FOLLOW ROAD FLAGS IN A NORTHEASTERLY DIRECTION APPROXIMATELY 0.15 MILES TO THE BEGINNING OF THE PROPOSED ACCESS ROAD TO THE NORTHEAST; FOLLOW ROAD FLAGS IN A NORTHEASTERLY DIRECTION APPROXIMATELY 0.5 MILES TO THE PROPOSED LOCATION

TOTAL DISTANCE FROM MYTON, UTAH TO THE PROPOSED LOCATION IS APPROXIMATELY 27.05 MILES.

Operator Certification:

a. Permitting and Compliance:

Eden Fine  
Permitting Clerk.  
XTO Energy Inc.  
382 CR 3100  
Aztec NM 87410  
505-333-3100

b. Drilling and Completions:

Brent Martin  
XTO Energy Inc.  
382 CR 3100  
Aztec, NM 87410  
505-333-3100

c. Certification:

I hereby certify that, I or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or XTO Energy Inc., are responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Executed this 10<sup>th</sup> day of May, 2010.

Signature: \_\_\_\_\_

Eden Fine

T11S, R15E, S.L.B.&M.

XTO ENERGY, INC.

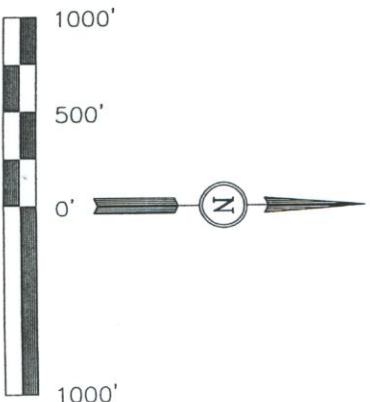
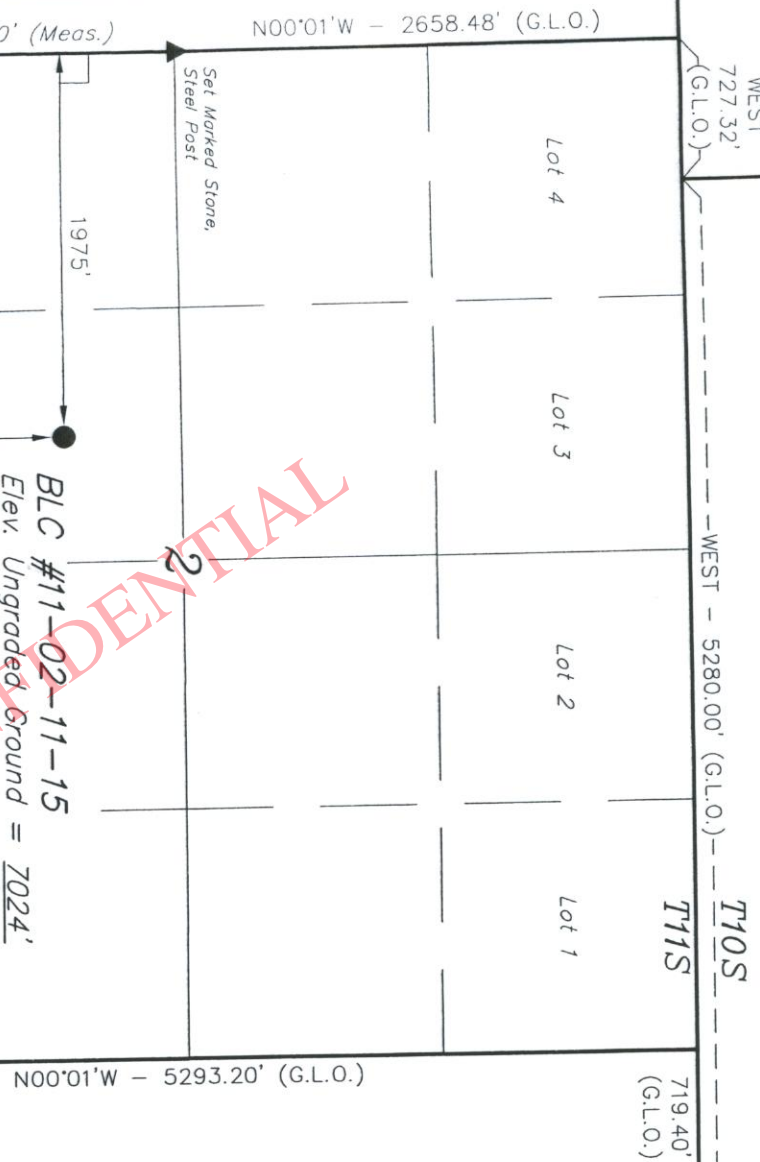
Well location, BLC #11-02-11-15, located as shown in the NE 1/4 SW 1/4 of Section 2, T11S, R15E, S.L.B.&M., Duchesne County, Utah.

BASIS OF ELEVATION

SPOT ELEVATION AT THE NORTHWEST CORNER OF SECTION 14, T10S, R18E, S.L.B.&M. TAKEN FROM THE MOON BOTTOM QUADRANGLE, UTAH, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5129 FEET.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



SCALE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR  
REGISTRATION NO. 161319  
STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING  
85 SOUTH 200 EAST - VERNAL, UTAH 84078

(435) 789-1017

SCALE	DATE SURVEYED:	DATE DRAWN:
1" = 1000'	03-31-10	04-05-10
PARTY	REFERENCES	
B.B. K.D. C.H.	G.L.O. PLAT	
WEATHER	FILE	
COOL	XTO ENERGY, INC.	





## XTO ENERGY, INC.

## TYPICAL CROSS SECTION FOR

BLC #11-02-11-15

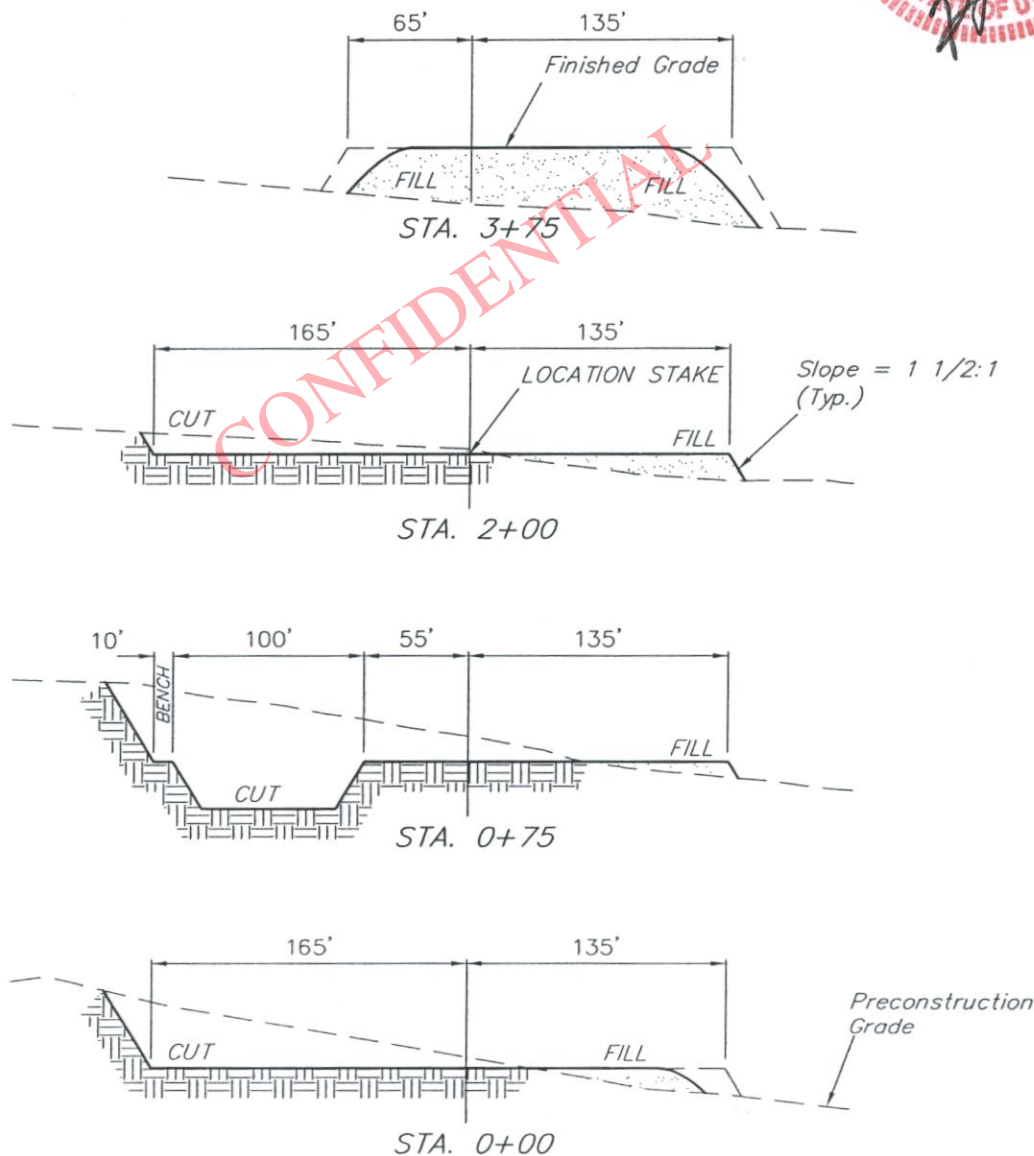
SECTION 2, T11S, R15E, S.L.B.&amp;M.

2031' FSL 1975' FWL

FIGURE #2

X-Section  
Scale  
1" = 20'  
1" = 50'

DATE: 04-05-10  
DRAWN BY: C.H.



## NOTE:

Topsoil should not be  
Stripped Below Finished  
Grade on Substructure Area.

## APPROXIMATE ACREAGES

WELL SITE DISTURBANCE =  $\pm 3.177$  ACRES  
ACCESS ROAD DISTURBANCE =  $\pm 1.754$  ACRES  
PIPELINE DISTURBANCE =  $\pm 1.783$  ACRES  
TOTAL =  $\pm 6.714$  ACRES

\* NOTE:  
FILL QUANTITY INCLUDES  
5% FOR COMPACTION

## APPROXIMATE YARDAGES

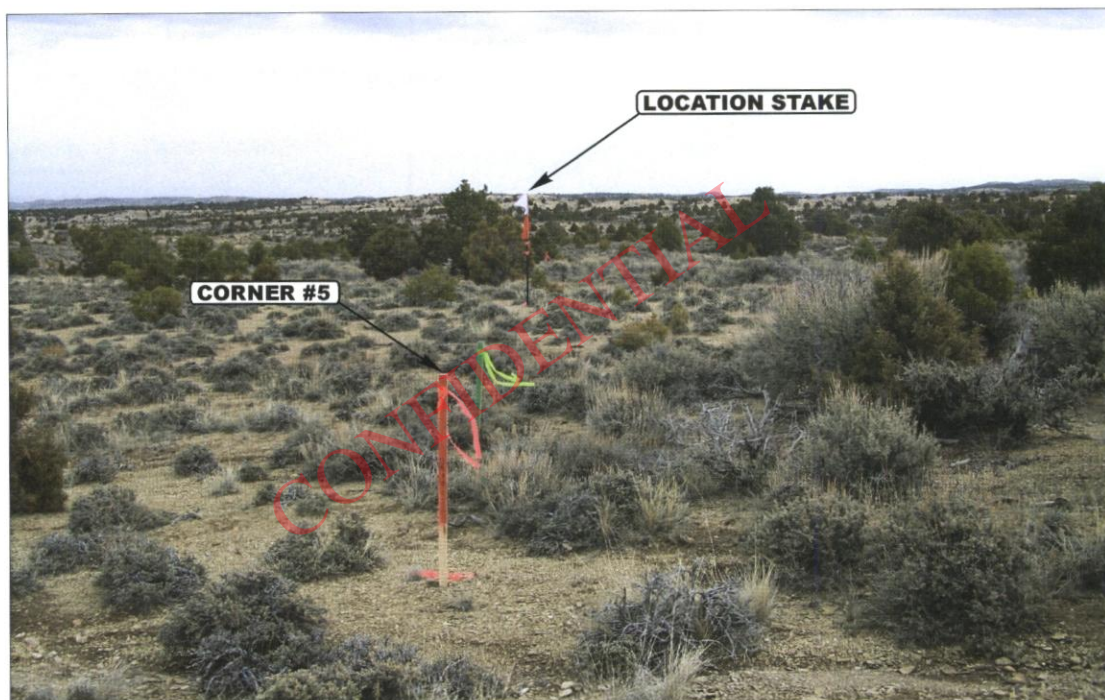
(6") Topsoil Stripping = 2,250 Cu. Yds.  
Remaining Location = 17,940 Cu. Yds.  
TOTAL CUT = 20,190 CU.YDS.  
FILL = 13,150 CU.YDS.

EXCESS MATERIAL = 7,040 Cu. Yds.  
Topsoil & Pit Backfill = 3,600 Cu. Yds.  
(1/2 Pit Vol.)  
EXCESS UNBALANCE = 3,440 Cu. Yds.  
(After Interim Rehabilitation)

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East • Vernal, Utah 84078 • (435) 789-1017



**XTO ENERGY, INC.**  
**BLC #11-02-11-15**  
**LOCATED IN DUCHESNE COUNTY, UTAH**  
**SECTION 2, T11S, R15E, S.L.B.&M.**



**PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE**

**CAMERA ANGLE: NORTHEASTERLY**



**PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS**

**CAMERA ANGLE: NORTHEASTERLY**



**UELS** Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

**LOCATION PHOTOS**

**04 01 10**  
MONTH DAY YEAR

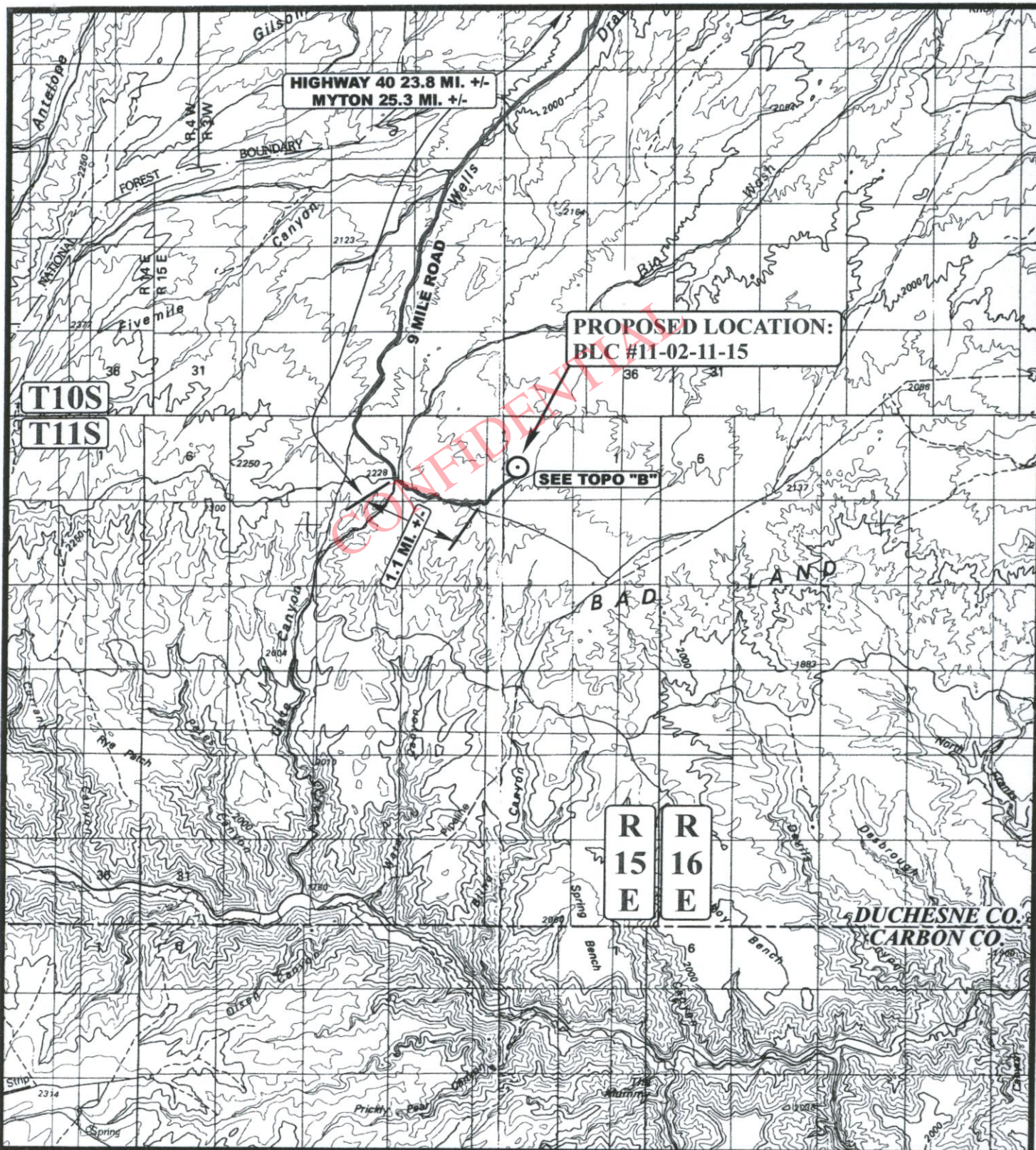
TAKEN BY: B.B.

DRAWN BY: J.L.G.

REVISED: 00-00-00

**PHOTO**





**LEGEND:**

○ PROPOSED LOCATION

**XTO ENERGY, INC.**

BLC #11-02-11-15

SECTION 2, T11S, R15E, S.L.B.&M.

2031' FSL 1975' FWL



Uintah Engineering & Land Surveying  
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(435) 789-1017 \* FAX (435) 789-1813



TOPOGRAPHIC  
MAP

04 01 10  
MONTH DAY YEAR

SCALE: 1:100,000 DRAWN BY: J.L.G. REVISED: 00-00-00

A  
TOPO





**LEGEND:**

— EXISTING ROAD  
 - - - - - PROPOSED ACCESS ROAD

**XTO ENERGY, INC.**

**BLC #11-02-11-15**  
**SECTION 2, T11S, R15E, S.L.B.&M.**  
**2031' FSL 1975' FWL**



**Uintah Engineering & Land Surveying**  
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 (435) 789-1017 \* FAX (435) 789-1813



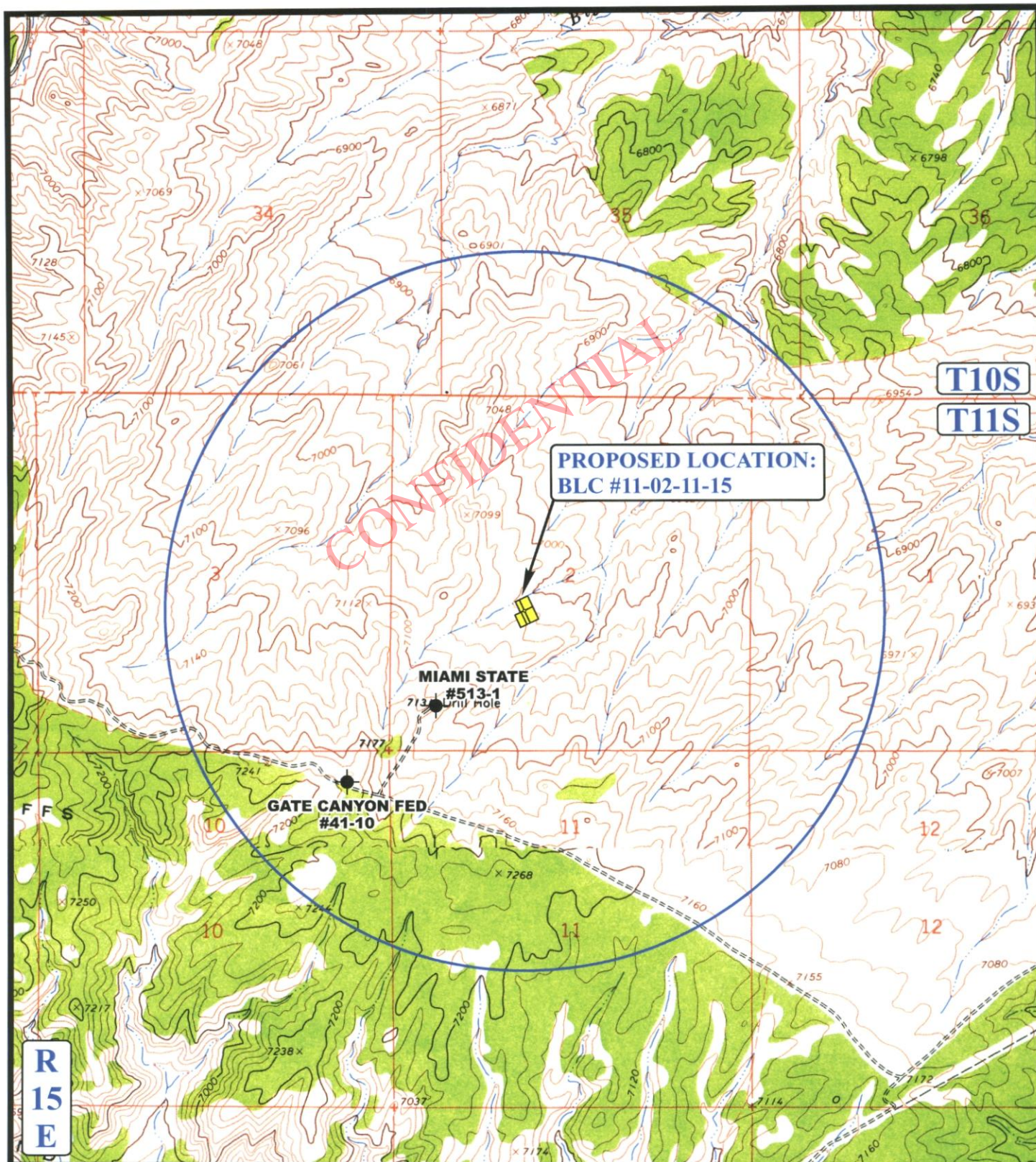
**TOPOGRAPHIC**  
**MAP**

**04 01 10**  
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: J.L.G. REVISED: 00-00-00

**B**  
 TOPO





**LEGEND:**

- |                   |                         |
|-------------------|-------------------------|
| ⊗ DISPOSAL WELLS  | ⊗ WATER WELLS           |
| ● PRODUCING WELLS | ⊗ ABANDONED WELLS       |
| ● SHUT IN WELLS   | ⊗ TEMPORARILY ABANDONED |



**XTO ENERGY, INC.**

**BLC #11-02-11-15**  
**SECTION 2, T11S, R15E, S.L.B.&M.**  
**2031' FSL 1975' FWL**



**Utah Engineering & Land Surveying**  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

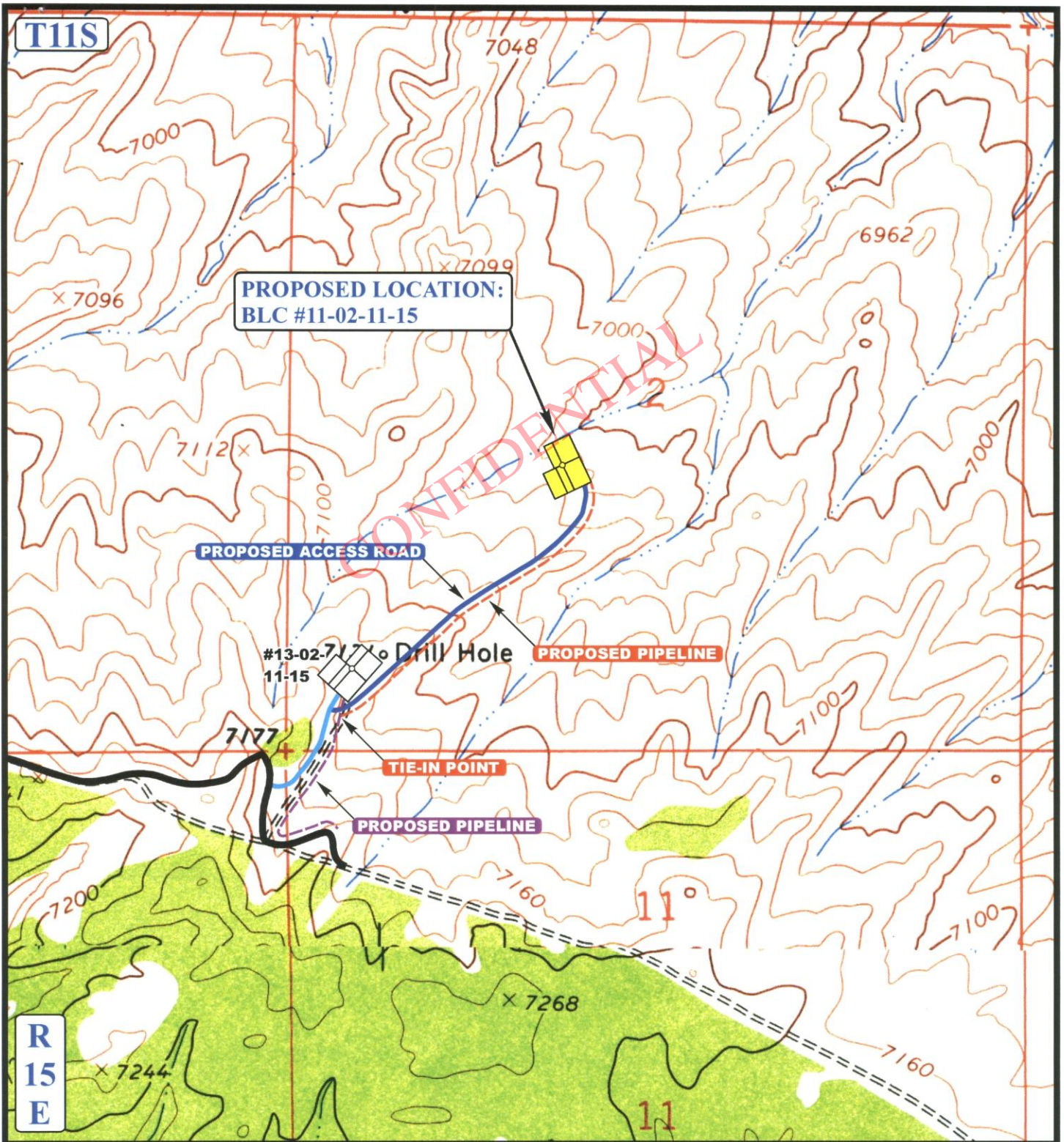
**TOPOGRAPHIC**  
**MAP**

**04 01 10**  
MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: J.L.G. REVISED: 00-00-00







APPROXIMATE TOTAL PIPELINE DISTANCE = 2,589' +/-

**LEGEND:**

-  EXISTING PIPELINE  
 PROPOSED PIPELINE  
 PROPOSED ACCESS

## SUMMIT GAS GATHERING

**BLC #11-02-11-15**  
**SECTION 2, T11S, R15E, S.L.B.&M.**  
**2031' FSL 1975' FWL**



**Uintah Engineering & Land Surveying**  
**85 South 200 East Vernal, Utah 84078**  
**(435) 789-1017 \* FAX (435) 789-1813**

TOPOGRAPHIC MAP 04 01 10  
MONTH DAY YEAR

SCALE: 1" = 1000'	DRAWN BY: J.L.G.	REVISED: 00-00-00
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**D**  
**TOPO**



# XTO ENERGY, INC.

## TYPICAL RIG LAYOUT FOR

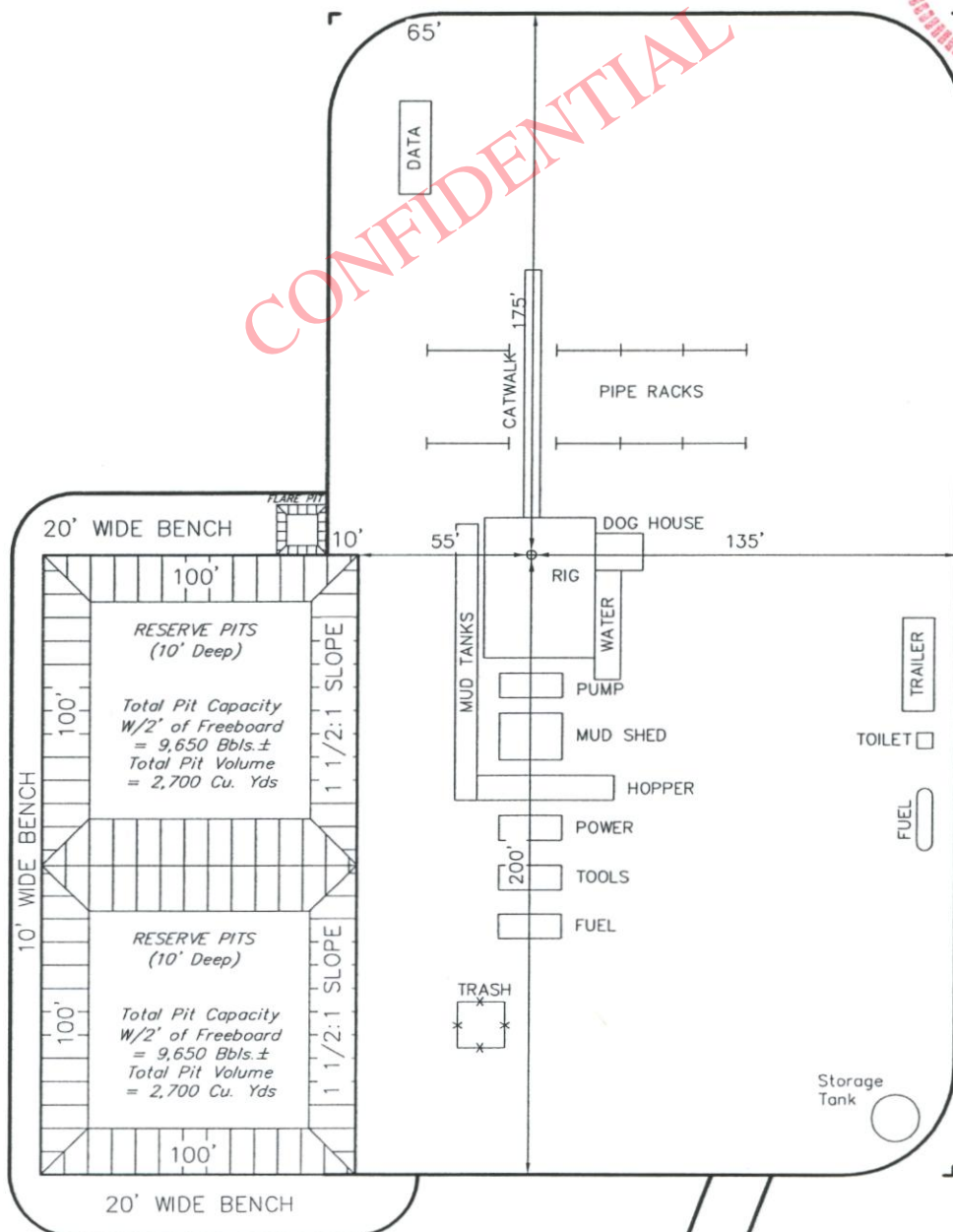
BLC #11-02-11-15  
SECTION 2, T11S, R15E, S.L.B.&M.  
2031' FSL 1975' FWL

FIGURE #3

SCALE: 1" = 60'

DATE: 04-05-10

DRAWN BY: C.H.



Install CMP  
As Needed

Proposed  
Access Road

UINTAH ENGINEERING & LAND SURVEYING

85 So. 200 East • Vernal, Utah 84078 • (435) 789-1017

# XTO Energy, Inc



10m Working Pressure Choke Manifold, Figure 2

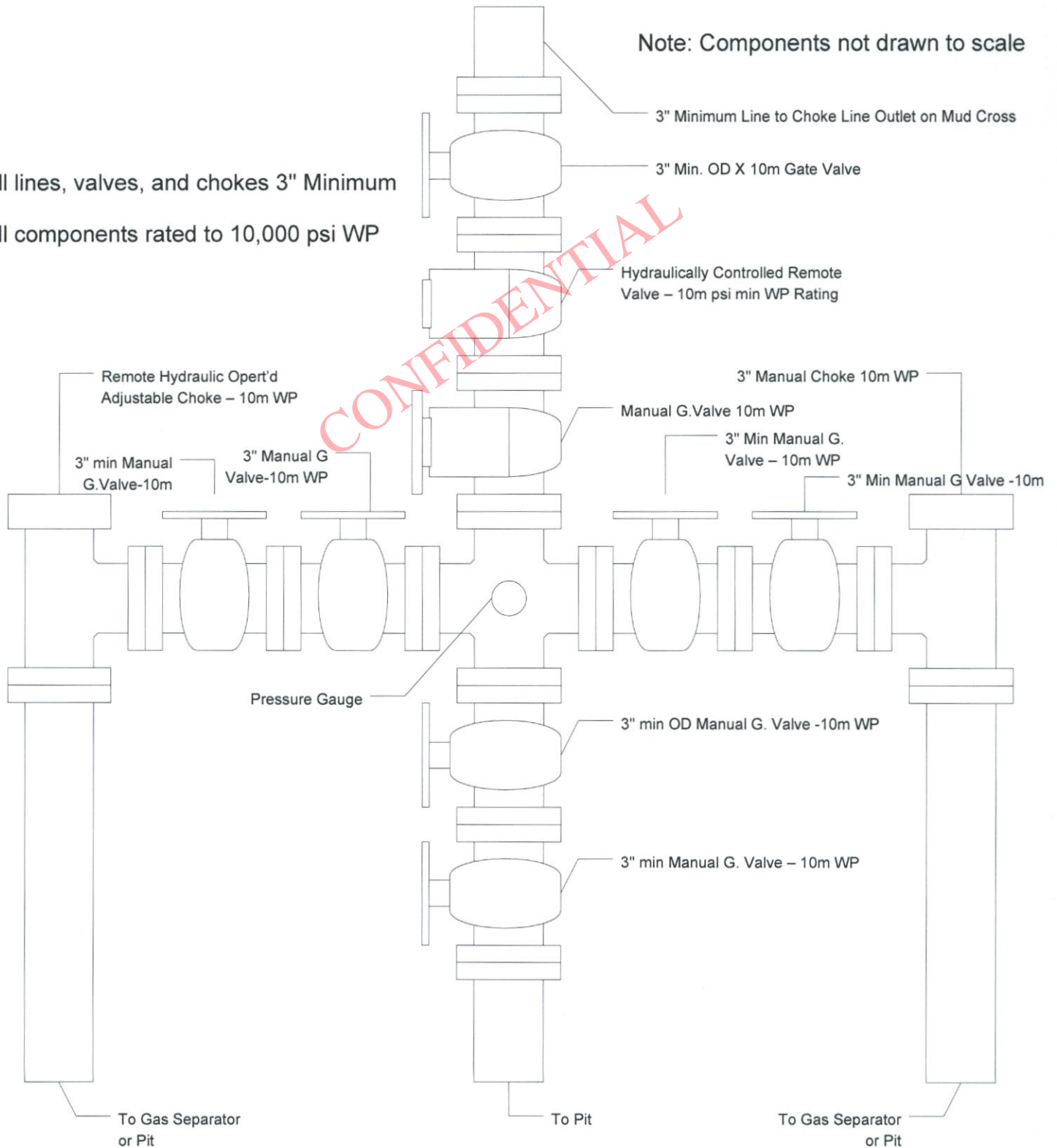
5/07/2010

Triples Rig

Note: Components not drawn to scale

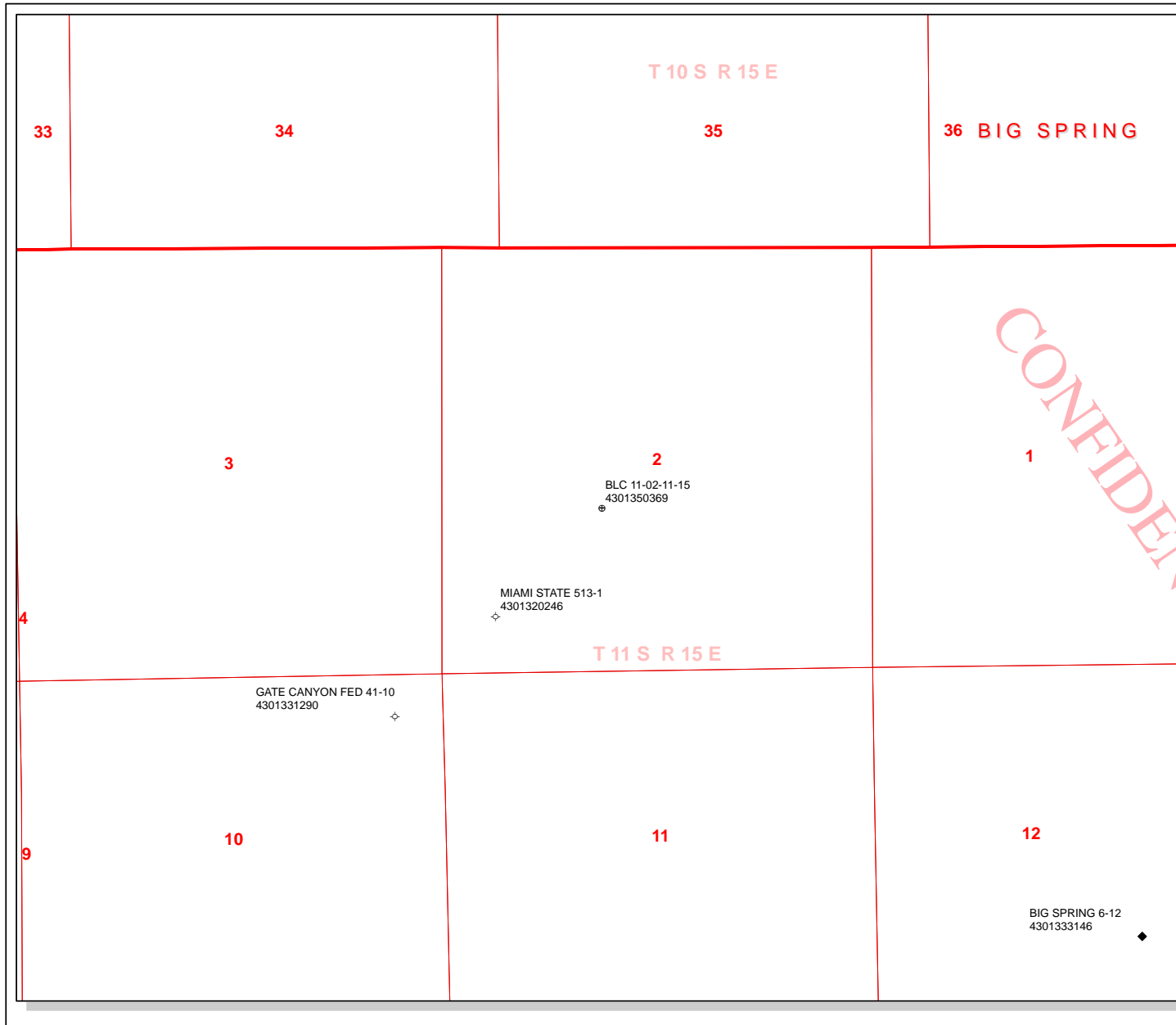
All lines, valves, and chokes 3" Minimum

All components rated to 10,000 psi WP



All connections subject to well pressure shall be flanged, welded, or clamped.

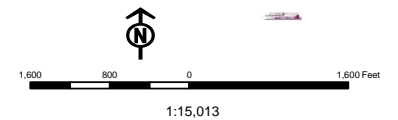
See drilling program for BOP testing requirements.



**API Number: 4301350369**  
**Well Name: BLC 11-02-11-15**  
**Township 11.0 S Range 15.0 E Section 2**  
**Meridian: SLBM**  
 Operator: XTO ENERGY INC

Map Prepared:  
 Map Produced by Diana Mason

- | Fields   | Wells Query                          |
|----------|--------------------------------------|
| Sections | ✕ <all other values>                 |
| Township | <b>Status</b>                        |
|          | ◆ APD - Approved Permit              |
|          | ⊙ DRL - Spudded (Drilling Commenced) |
|          | ↗ GIW - Gas Injection                |
|          | ⋈ GS - Gas Storage                   |
|          | ✕ LA - Location Abandoned            |
|          | ⊕ LOC - New Location                 |
|          | ⚠ OPS - Operation Suspended          |
|          | ⊕ PA - Plugged Abandoned             |
|          | ⋈ PGW - Producing Gas Well           |
|          | ● POW - Producing Oil Well           |
|          | ⊙ RET - Returned APD                 |
|          | ⋈ SGW - Shut-in Gas Well             |
|          | ⋈ SOW - Shut-in Oil Well             |
|          | ⋈ TA - Temp. Abandoned               |
|          | ○ TW - Test Well                     |
|          | ↘ WDW - Water Disposal               |
|          | ↗ WWI - Water Injection Well         |
|          | ● WSW - Water Supply Well            |



**From:** Jim Davis  
**To:** Hill, Brad; Mason, Diana; eden\_fine@xtoenergy.com  
**CC:** Bonner, Ed; Garrison, LaVonne; kyla\_vaughan@xtoenergy.com  
**Date:** 6/2/2010 11:29 AM  
**Subject:** APD approval and permission to construct road and pad

The following APD has been approved by SITLA including arch and paleo clearance. XTO has requested permission to construct the access road, well pad and pit in advance of APD approval from DOGM. SITLA hereby grants that request. **XTO shall not begin spudding operations prior to receiving permission from DOGM in the form of an approved APD.** Please contact me with any questions.

API# 4301350369 WELL NAME: BLC 11-02-11-15 OPERATOR: XTO Energy Inc  
LOC: Sec2, T110S, R150E

Thank you.  
-Jim Davis

Jim Davis  
Utah Trust Lands Administration  
jimdavis1@utah.gov  
Phone: (801) 538-5156



Well Name	XTO ENERGY INC BLC 11-02-11-15 43013503690000			
String	Cond	Surf	Prod	
Casing Size(in)	13.375	9.625	7.000	
Setting Depth (TVD)	500	5000	16830	
Previous Shoe Setting Depth (TVD)	40	500	5000	
Max Mud Weight (ppg)	8.4	8.4	12.5	
BOPE Proposed (psi)	500	10000	10000	
Casing Internal Yield (psi)	1730	5750	12460	
Operators Max Anticipated Pressure (psi)	10064		11.5	

Calculations	Cond String	13.375	"
Max BHP (psi)	.052*Setting Depth*MW=	218	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	158	YES air drill
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	108	YES OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	117	NO OK
Required Casing/BOPE Test Pressure=		500	psi
*Max Pressure Allowed @ Previous Casing Shoe=		40	psi *Assumes 1psi/ft frac gradient

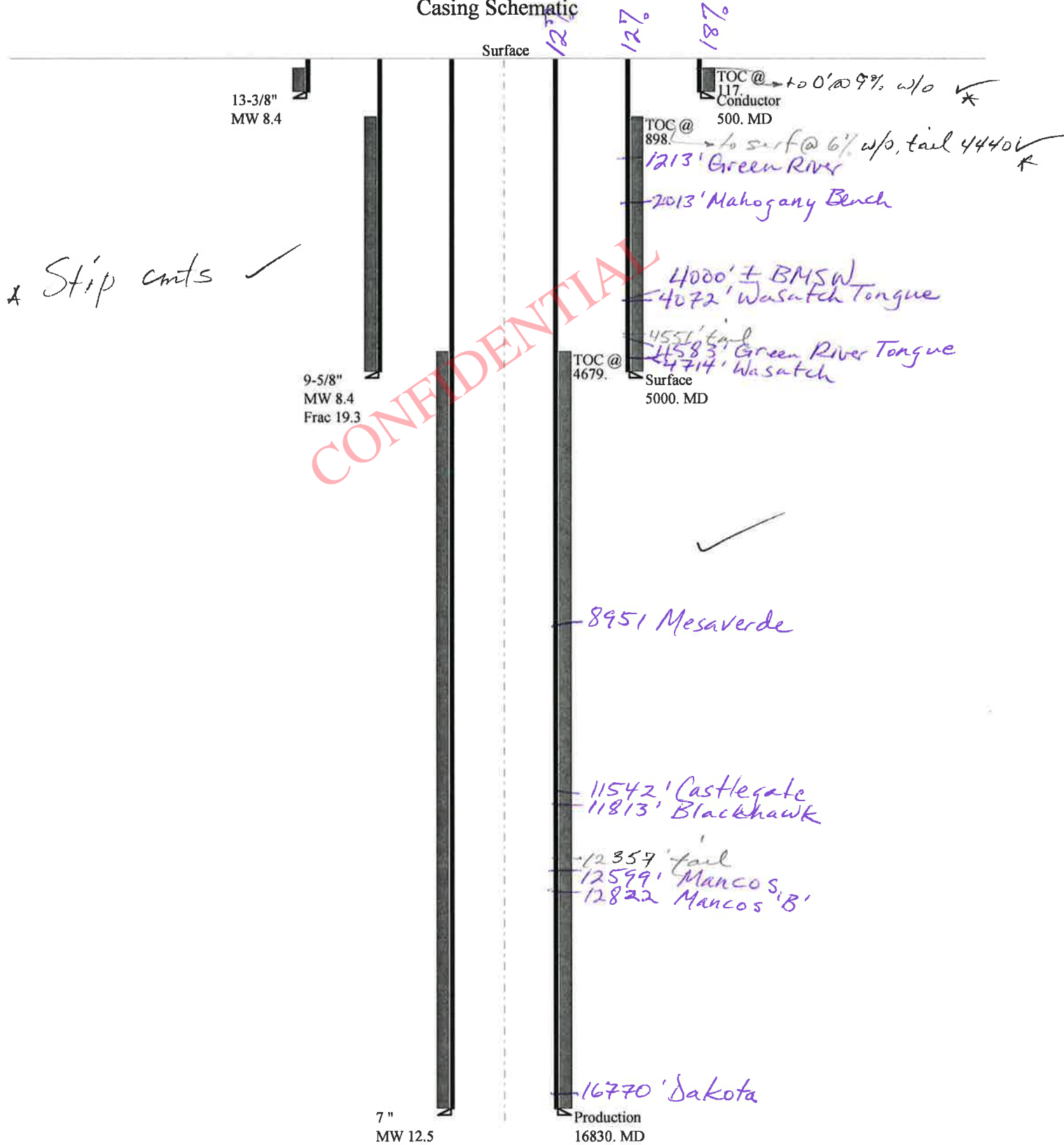
Calculations	Surf String	9.625	"
Max BHP (psi)	.052*Setting Depth*MW=	2184	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	1584	YES
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	1084	YES OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	1194	NO Reasonable
Required Casing/BOPE Test Pressure=		4025	psi
*Max Pressure Allowed @ Previous Casing Shoe=		500	psi *Assumes 1psi/ft frac gradient

Calculations	Prod String	7.000	"
Max BHP (psi)	.052*Setting Depth*MW=	10940	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	8920	YES
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	7237	YES OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	8337	NO Reasonable
Required Casing/BOPE Test Pressure=		8722	psi
*Max Pressure Allowed @ Previous Casing Shoe=		5000	psi *Assumes 1psi/ft frac gradient

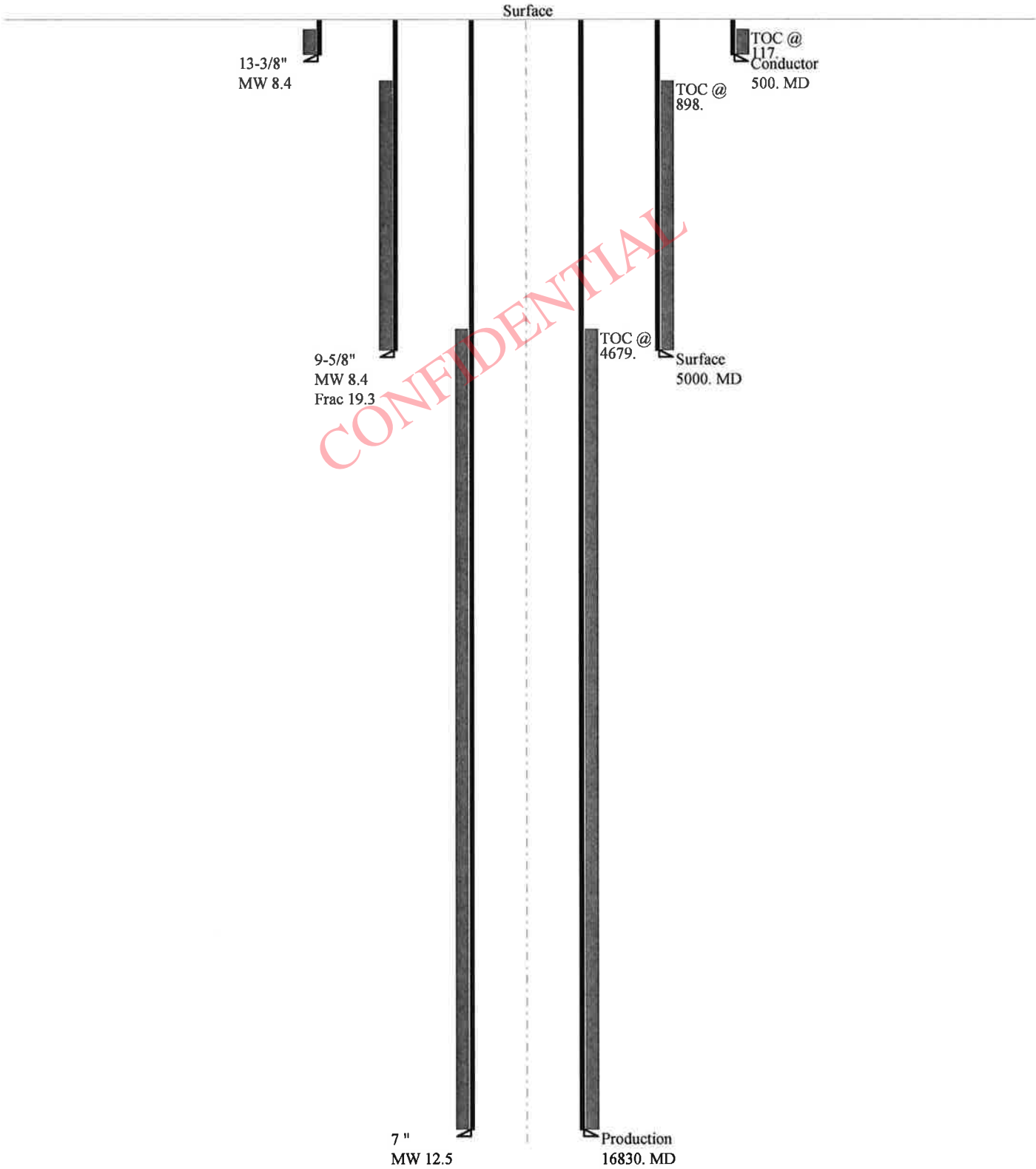
Calculations	String		"
Max BHP (psi)	.052*Setting Depth*MW=		
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=		NO
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=		NO
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=		NO
Required Casing/BOPE Test Pressure=			psi
*Max Pressure Allowed @ Previous Casing Shoe=			psi *Assumes 1psi/ft frac gradient

43013503690000 BLC 11-02-11-15

Casing Schematic



43013503690000 BLC 11-02-11-15  
Casing Schematic



Well name:

**43013503690000 BLC 11-02-11-15**Operator: **XTO ENERGY INC**String type: **Conductor**

Project ID:

**43-013-50369**Location: **DUCHESNE COUNTY****Design parameters:****Collapse**Mud weight: 8.400 ppg  
Design is based on evacuated pipe.**Minimum design factors:****Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**H2S considered? No  
Surface temperature: 74 °F  
Bottom hole temperature: 81 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 100 ft

Cement top: 117 ft

**Burst**Max anticipated surface pressure: 158 psi  
Internal gradient: 0.120 psi/ft  
Calculated BHP 218 psi

No backup mud specified.

**Tension:**8 Round STC: 1.80 (J)  
8 Round LTC: 1.70 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.50 (B)**Non-directional string.**Tension is based on air weight.  
Neutral point: 438 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	500	13.375	48.00	H-40	ST&C	500	500	12.59	6199
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	218	740	3.392	218	1730	7.93	24	322	13.42 J

Prepared by: Helen Sadik-Macdonald  
Div of Oil, Gas & MiningPhone: 801 538-5357  
FAX: 801-359-3940Date: June 9, 2010  
Salt Lake City, Utah**Remarks:**

Collapse is based on a vertical depth of 500 ft, a mud weight of 8.4 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop &amp; Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:

**43013503690000 BLC 11-02-11-15**Operator: **XTO ENERGY INC**String type: **Surface**

Project ID:

**43-013-50369**Location: **DUCHESNE COUNTY****Design parameters:****Collapse**Mud weight: 8.400 ppg  
Design is based on evacuated pipe.**Minimum design factors:****Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**H2S considered? No  
Surface temperature: 74 °F  
Bottom hole temperature: 144 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 100 ft

Cement top: 898 ft

**Burst**Max anticipated surface  
pressure: 3,900 psi  
Internal gradient: 0.220 psi/ft  
Calculated BHP 5,000 psi

No backup mud specified.

**Tension:**8 Round STC: 1.80 (J)  
8 Round LTC: 1.70 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.50 (B)Tension is based on air weight.  
Neutral point: 4,375 ft**Non-directional string.****Re subsequent strings:**Next setting depth: 16,830 ft  
Next mud weight: 12.500 ppg  
Next setting BHP: 10,929 psi  
Fracture mud wt: 19.250 ppg  
Fracture depth: 5,000 ft  
Injection pressure: 5,000 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	5000	9.625	40.00	N-80	LT&C	5000	5000	8.75	63623
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	2182	3090	1.416	5000	5750	1.15	200	737	3.69 J

Prepared Helen Sadik-Macdonald  
by: Div of Oil, Gas & MiningPhone: 801 538-5357  
FAX: 801-359-3940Date: June 9, 2010  
Salt Lake City, Utah**Remarks:**

Collapse is based on a vertical depth of 5000 ft, a mud weight of 8.4 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop &amp; Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:

**43013503690000 BLC 11-02-11-15**Operator: **XTO ENERGY INC**String type: **Production**

Project ID:

**43-013-50369**Location: **DUCHESNE COUNTY****Design parameters:****Collapse**Mud weight: 12.500 ppg  
Internal fluid density: 2.330 ppg**Minimum design factors:****Collapse:**

Design factor 1.125

**Environment:**H2S considered? No  
Surface temperature: 74 °F  
Bottom hole temperature: 310 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 100 ft**Burst:**

Design factor 1.00

Cement top: 4,679 ft

**Burst**Max anticipated surface pressure: 7,226 psi  
Internal gradient: 0.220 psi/ft  
Calculated BHP 10,929 psi**Tension:**8 Round STC: 1.80 (J)  
8 Round LTC: 1.80 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.60 (B)**Non-directional string.**

No backup mud specified.

Tension is based on air weight.  
Neutral point: 13,648 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	16830	7	32.00	P-110	LT&C	16830	16830	6	208604
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	8891	10780	1.212	10929	12460	1.14	538.6	897	1.67 J

Prepared Helen Sadik-Macdonald  
by: Div of Oil, Gas & MiningPhone: 801 538-5357  
FAX: 801-359-3940Date: June 9, 2010  
Salt Lake City, Utah**Remarks:**

Collapse is based on a vertical depth of 16830 ft, a mud weight of 12.5 ppg. An internal gradient of .121 psi/ft was used for collapse from TD. Collapse strength is based on the Westcott, Dunlop &amp; Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:

**43013503690000 BLC 11-02-11-15**Operator: **XTO ENERGY INC**String type: **Production**

Project ID:

**43-013-50369**Location: **DUCHESNE COUNTY****Design parameters:****Collapse**

Mud weight: 12.500 ppg  
 Internal fluid density: 2.330 ppg

**Minimum design factors:****Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
 Surface temperature: 74 °F  
 Bottom hole temperature: 310 °F  
 Temperature gradient: 1.40 °F/100ft  
 Minimum section length: 100 ft

Cement top: 4,679 ft

**Burst**

Max anticipated surface pressure: 7,226 psi  
 Internal gradient: 0.220 psi/ft  
 Calculated BHP 10,929 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
 8 Round LTC: 1.80 (J)  
 Buttress: 1.60 (J)  
 Premium: 1.50 (J)  
 Body yield: 1.60 (B)

**Non-directional string.**

Tension is based on buoyed weight.

Neutral point: 13,648 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	16830	7	32.00	P-110	LT&C	16830	16830	6	208604
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	8891	10780	1.212	10929	12460	1.14	436.7	897	2.05 J

Prepared Helen Sadik-Macdonald  
 by: Div of Oil, Gas & Mining

Phone: 801 538-5357  
 FAX: 801-359-3940

Date: June 9, 2010  
 Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 16830 ft, a mud weight of 12.5 ppg. An internal gradient of .121 psi/ft was used for collapse from TD. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

*Engineering responsibility for use of this design will be that of the purchaser.*

**Helen Sadik-Macdonald - Fw: Joint Strength**

**From:** <Brent\_Martin@xtoenergy.com>  
**To:** <hmacdonald@utah.gov>, <dustindoucet@utah.gov>  
**Date:** 6/14/2010 4:08 PM  
**Subject:** Fw: Joint Strength  
**CC:** <Justin\_Niederhofer@xtoenergy.com>  
**Attachments:** 7 in Qck Dsgn Chrt 9.625.pdf

Helen:

I agree with your SF calculation based on the 7", 32#, P-110, LTC joint strength value which ignores the buoyancy effects of the drilling fluid. I have always set the minimum allowable safety factor value at 1.6 (ignoring fluid buoyancy effects), which is not uncommon for industry tensile safety factor standards. In fact some of the industry pioneers (ie. Dub Goins, O'Brien, and others) advocated the use of a minimum allowable 1.6 SF for tension, and some of the major oil and gas companies even allowed safety factors approaching 1.4 on a case dependent basis. I know the old Lone Star Steel Biaxial Stress Model recommends a 1.8 SF for tensile considerations ignoring buoyancy effect of the drilling fluid. To determine whether the use of the fluid buoyancy effect is practical, an investigation of the closest offset wells should be reviewed to determine the possibility of a truly evacuated wellbore at any point during drilling operations.

The GASCO GCS 23-16-11-15 (API # 4301332685) well realized a 12.2 ppg mud density at the TD equivalent of the two proposed XTO wells (~15,700' MD/TVD). The PETROCANADA Rye Patch Federal #24-21 (API # 4301333443) reached total depth of 15,500' MD/TVD with a 12.8 ppg mud density. These offsets are located 3.0 miles and 5.5 miles more or less SW from the subject BLC 11-02-11-15 well. We are projecting a 12.5 ppg mud density at the proposed TD's of 16830' and 16850' MD's/TVD's for our subject wells. After careful review of the offset data (daily drilling records), there is no reason to believe with the planned 9-5/8" surface shoes at 5000' MD/TVD for these wells, that any situation would be encountered with an evacuated wellbore with the 7" casing in the hole. Once the casing is landed @ 16,830'/16,850' (as per permit application), the production pipe will be cemented back to surface. This cementing design is based on actual results from GASCO's GCS 23-16-11-15 well, with similar wellbore geometry to our proposed, in which they cemented their 5-1/2" production casing from 16,500' back to surface (with 120 bbls of cement circulated back to surface!). Once the cement has cured (prior to completion and production operations), the cement bonding to the pipe will support the pipe weight during ensuing completion/production operations.

I have attached Lone Star Steel's quick look casing design charts as below. This chart shows 7", 32#, S-95 grade with buttress connections for the top 2000' near surface acceptable, to a depth of 18,000 feet (vertical). The joint strength for this particular grade is 885,000 lbs which is less than the 897,000 lbs of the P-110 grade as per your calculations below.

To Err on the conservative side, instead of using the buoyancy factor for the anticipated heavier 12.5 ppg mud, let's calculate the SF (with buoyancy) using the lesser buoyancy factor for merely fresh water (0.8727). The calculation for the tensile safety factor would be as follows:

$$897,000 / [(16830) * (32) * (0.8727)] = 1.90 \text{ SF}$$

With the rationale that an evacuated wellbore at total depth is not a possibility as per existing offset well records, and that cement to surface has been easily achieved with an equivalent wellbore design in the closest offset, and the fact that there will be a buoyancy effect at the time the cement is run and cemented: XTO respectfully requests that the 7", 32#, P-110, LTC casing design be approved with a tensile SDF of 1.67 (ignoring buoyancy) and a tensile SDF of 1.90 (including buoyancy).



Regards,

Brent H Martin  
XTO Farmington Drilling Manager  
O (505) 333-3110  
C (505) 320-4074  
brent\_martin@xtoenergy.com

----- Forwarded by Brent Martin/FAR/CTOC on 06/14/2010 02:32 PM -----

Justin Niederhofer/FAR/CTOC

06/14/2010 09:14 AM

To Brent Martin/FAR/CTOC

cc

Subject Fw: Joint Strength

Brent,

This is a follow up email to a message Helen left me and a phone conversation we had about the BLC 11-02-11-15 and the 13-02-11-15. If you have any questions regarding this matter, please let me know.

Thanks

Justin Niederhofer  
Drilling Engineer  
Farmington, NM  
(505) 333-3199 (Office)  
(505) 320-0158 (Cell)

----- Forwarded by Justin Niederhofer/FAR/CTOC on 06/14/2010 09:11 AM -----

"Helen Sadik-Macdonald" <hmacdonald@utah.gov>

To "Justin Niederhofer" <Justin\_Niederhofer@xtoenergy.com>

cc "Dustin Doucet" <dustindoucet@utah.gov>

06/10/2010 11:18 AM

Subject Joint Strength

Hi Justin,

As a follow-up to our discussion:

You are correct on body yield strength.

Joint strength, however is 897,000 lbs. Divided by 16830 ft, divided by 32#/ft comes out to 1.67. This is below the DF for LTC joint of 1.80.

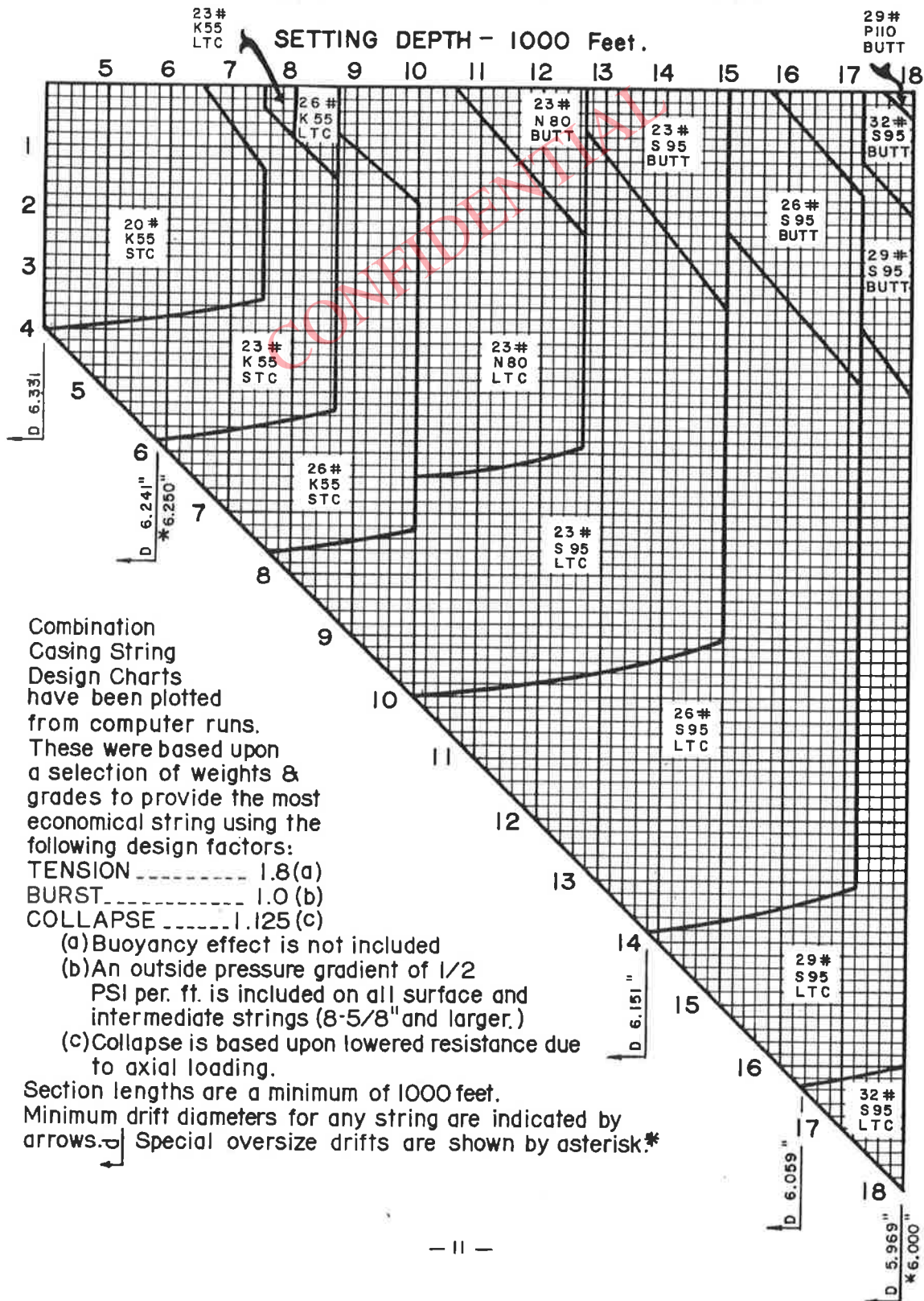
Regards,

Helen Sadik-Macdonald, CPG  
Engineering Geologist  
Utah Div. of Oil, Gas & Mining  
PO Box 145801  
Salt Lake City, UT 84114-5801

LONE STAR STEEL COMPANY

7" in 9.625 ppg mud

COMBINATION CASING STRINGS



# **ON-SITE PREDRILL EVALUATION**

## **Utah Division of Oil, Gas and Mining**

**Operator** XTO ENERGY INC  
**Well Name** BLC 11-02-11-15  
**API Number** 43013503690000 **APD No** 2672 **Field/Unit** UNDESIGNATED  
**Location: 1/4,1/4** NESW **Sec 2 Tw** 11.0S **Rng** 15.0E 2031 FSL 1975 FWL  
**GPS Coord (UTM)** 568105 4415049 **Surface Owner**

### **Participants**

Floyd Bartlett (DOGM), Eden Fine ( Permitting XTO), Misty Stelly (Environmental Specialist XTO), Jody Mecham (Construction, XTO), Kyla Vaughn (Permitting, XTO); Randy Fredrick (Chapman Construction); Jim Davis ( SITLA); Ben Williams (UDWR).

### **Regional/Local Setting & Topography**

The location is approximately 37 miles straight-line distance southwest of Roosevelt, UT. and 27 road miles southwest of Myton, UT.. Access to the site is by State of Utah, Duchesne County and existing or planned oilfield development roads. Approximately 0.5 miles of additional construction will be required. The general area is within the Bad Lands area of southern Duchesne County north of the Wells Draw and Gate Canyon Divide. Big Wash is the major drainage in the area. It is an ephemeral drainage running in a northeasterly direction toward the Green River a distance of several miles. No know springs or seeps are in the immediate area.

This specific site for the BLC 11-02-11-15 deep gas well is on a wide gentle sloping or rolling ridge. The general slope is to the northeast. A wide swale exists to the west with the location extending toward the bottom of this drainage. Swales and broken terrain exist to the east. The pad is oriented in a south to northerly direction. Up to 13 feet of cut in the reserve pit or southwest side of the location will be moved northeasterly to construct the pad. Light surface run-off occurs down the proposed site, however no diversion ditches are needed. The selected site appears to be a suitable location for constructing a pad, drilling and operating a well and is the best site in the immediate area.

The pre-drill investigation of the surface was performed on May 27, 2010. Both the surface and the minerals are owned by S.I.T.L.A.

### **Surface Use Plan**

#### **Current Surface Use**

Grazing  
 Recreational  
 Wildlife Habitat  
 Deer Winter Range

<b>New Road Miles</b>	<b>Well Pad</b>	<b>Src Const Material</b>	<b>Surface Formation</b>
0.5	<b>Width 300 Length 375</b>	Onsite	UNTA

**Ancillary Facilities** N

### **Waste Management Plan Adequate?**

### **Environmental Parameters**

**Affected Floodplains and/or Wetlands** N

**Flora / Fauna**

Cattle elk, deer, small mammals and birds.

Vegetation includes pinion, juniper, big sagebrush, stipa, curly mesquite, Indian ricegrass, sego lily, penstemon, loco weed, hordium jubatum, buckwheat,, poa, Indian paintbrush and spring annuals. Grass vegetation is much better in the bottom of the swales.

**Soil Type and Characteristics**

Surface soils are a moderately deep shaley sandy clay loam.

**Erosion Issues** N

**Sedimentation Issues** N

**Site Stability Issues** N

**Drainage Diverson Required?** N

**Berm Required?** N

**Erosion Sedimentation Control Required?** N

**Paleo Survey Run?** Y **Paleo Potental Observed?** N **Cultural Survey Run?** Y **Cultural Resources?**

**Reserve Pit****Site-Specific Factors****Site Ranking**

<b>Distance to Groundwater (feet)</b>	100 to 200	5	
<b>Distance to Surface Water (feet)</b>	>1000	0	
<b>Dist. Nearest Municipal Well (ft)</b>	>5280	0	
<b>Distance to Other Wells (feet)</b>	>1320	0	
<b>Native Soil Type</b>	Mod permeability	10	
<b>Fluid Type</b>	Fresh Water	5	
<b>Drill Cuttings</b>	Normal Rock	0	
<b>Annual Precipitation (inches)</b>	10 to 20	5	
<b>Affected Populations</b>			
<b>Presence Nearby Utility Conduits</b>	Not Present	0	
<b>Final Score</b>		25	1 Sensitivity Level

**Characteristics / Requirements**

The planned reserve pit is 100' by 200' located within a cut area on the on the southwest side of the location. It is 10 feet deep with a 10-foot wide outer bench. Stability should not be a problem. A 16-mil liner is required.

**Closed Loop Mud Required?** N **Liner Required?** Y **Liner Thickness** 16 **Pit Underlayment Required?** Y

**Other Observations / Comments**



List of attendees is too long to enter in General Section.

Floyd Bartlett (DOGM), Eden Fine ( Permitting XTO), Misty Stelly (Environmental Specialist XTO), Damien Jones (Compressor and Pipeline XTO), Craig Nelson ( Safety XTO), Terry Sholes (SGG, XTO), Terry Sutt (SGG, XTO), Jody Mecham (Construction, XTO), Derick Sutton (Automation, XTO), Kyla Vaughn (Permitting, XTO); Randy Fredrick (Chapman Construction); Jim Davis ( SITLA); Brandon Bouthorpe ( UELS), Ben Williams (UDWR).

Floyd Bartlett  
**Evaluator**

5/27/2010  
**Date / Time**

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# Application for Permit to Drill

## Statement of Basis

6/29/2010

Utah Division of Oil, Gas and Mining

Page 1

<b>APD No</b>	<b>API WellNo</b>	<b>Status</b>	<b>Well Type</b>	<b>Surf Owner</b>	<b>CBM</b>
2672	43013503690000	SITLA	GW	S	No
<b>Operator</b>	XTO ENERGY INC			<b>Surface Owner-APD</b>	
<b>Well Name</b>	BLC 11-02-11-15			<b>Unit</b>	
<b>Field</b>	UNDESIGNATED			<b>Type of Work</b>	
				DRILL	
<b>Location</b>	NESW 2 11S 15E S 2031 FSL 1975 FWL GPS Coord (UTM) 568091E 4415035N				

### Geologic Statement of Basis

XTO has proposed 500' of conductor and 5,000' of surface casing at the proposed location. Both are to be cemented to surface. The base of the moderately saline water is estimated to at approximately 4,000'. A search of Division of Water Rights records shows no water wells within a 10,000' radius of the proposed location. The surface formation at this location is the Green River Formation. This area can be considered a recharge area for aquifers in the Green River Formation. The Green River Formation is made up of interbedded sands, limestones and shales. The proposed casing and cementing program should adequately protect the recharge area and any useable sources of ground water.

Brad Hill  
APD Evaluator

6/3/2010  
Date / Time

### Surface Statement of Basis

The location is approximately 37 miles straight-line distance southwest of Roosevelt, UT. and 27 road miles southwest of Myton, UT.. Access to the site is by State of Utah, Duchesne County and existing or planned oilfield development roads. Approximately 0.5 miles of additional construction will be required. The general area is within the Bad Lands area of southern Duchesne County north of the Wells Draw and Gate Canyon Divide. Big Wash is the major drainage in the area. It is an ephemeral drainage running in a northeasterly direction toward the Green River a distance of several miles. No know springs or seeps are in the immediate area.

This specific site for the BLC 11-02-11-15 deep gas well is on a wide gentle sloping or rolling ridge. The general slope is to the northeast. A wide swale exists to the west with the location extending toward the bottom of this drainage. Swales and broken terrain exist to the east. The pad is oriented in a south to northerly direction. Up to 13 feet of cut in the reserve pit or southwest side of the location will be moved northeasterly to construct the pad. Light surface run-off occurs down the proposed site, however no diversion ditches are needed. The selected site appears to be a suitable location for constructing a pad, drilling and operating a well and is the best site in the immediate area.

The pre-drill investigation of the surface was performed on May 27, 2010. Both the surface and the minerals are owned by S.I.T.L.A. Jim Davis of S.I.T.L.A attended the visit. He had no concerns and furnished XTO a seed mix to be used in reclamation of the site. Ben Williams of the UDWR also attended the pre-site. He said the area is classified as crucial winter habitat for elk and deer. He recommended a seasonal restriction from December 1 to April 15 for pad construction, drilling and other significant disturbances in the area. Mr. Davis of SITLA requested that XTO abide by this restriction but if for reasons felt they could not, to contact SITLA. The area is part of an old chaining that has been improved for livestock and big game forage. No other wildlife is expected to be significantly affected.

Floyd Bartlett  
Onsite Evaluator

5/27/2010  
Date / Time

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**Application for Permit to Drill  
Statement of Basis**

6/29/2010

**Utah Division of Oil, Gas and Mining**

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Page 2

**Conditions of Approval / Application for Permit to Drill**

<b>Category</b>	<b>Condition</b>
Pits	A synthetic liner with a minimum thickness of 16 mils with a felt subliner shall be properly installed and maintained in the reserve pit.
Surface	The reserve pit shall be fenced upon completion of drilling operations.

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**WORKSHEET  
APPLICATION FOR PERMIT TO DRILL**

**APD RECEIVED:** 5/18/2010

**API NO. ASSIGNED:** 43013503690000

**WELL NAME:** BLC 11-02-11-15

**OPERATOR:** XTO ENERGY INC (N2615)

**PHONE NUMBER:** 505 333-3664

**CONTACT:** Eden Fine

**PROPOSED LOCATION:** NESW 2 110S 150E

**Permit Tech Review:** ☒

**SURFACE:** 2031 FSL 1975 FWL

**Engineering Review:** ☒

**BOTTOM:** 2031 FSL 1975 FWL

**Geology Review:** ☒

**COUNTY:** DUCHESNE

**LATITUDE:** 39.88453

**LONGITUDE:** -110.20368

**UTM SURF EASTINGS:** 568091.00

**NORTHINGS:** 4415035.00

**FIELD NAME:** UNDESIGNATED

**LEASE TYPE:** 3 - State

**LEASE NUMBER:** ML-51638

**PROPOSED PRODUCING FORMATION(S):** DAKOTA

**SURFACE OWNER:** 3 - State

**COALBED METHANE:** NO

**RECEIVED AND/OR REVIEWED:**

☒ **PLAT**

☒ **Bond:** STATE/FEE - 104312762

☐ **Potash**

☐ **Oil Shale 190-5**

☐ **Oil Shale 190-3**

☐ **Oil Shale 190-13**

☒ **Water Permit:** Commercial Water

☐ **RDCC Review:**

☐ **Fee Surface Agreement**

☐ **Intent to Commingle**

**Commingle Approved**

**LOCATION AND SITING:**

☐ **R649-2-3.**

**Unit:**

☐ **R649-3-2. General**

☐ **R649-3-3. Exception**

☒ **Drilling Unit**

**Board Cause No:** R649-3-2

**Effective Date:**

**Siting:**

☐ **R649-3-11. Directional Drill**

**Comments:** Presite Completed

**Stipulations:** 5 - Statement of Basis - bhill  
8 - Cement to Surface -- 2 strings - hmacdonald  
23 - Spacing - dmason



## State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
*Executive Director*

Division of Oil, Gas and Mining

JOHN R. BAZA  
*Division Director*

### Permit To Drill

\*\*\*\*\*

**Well Name:** BLC 11-02-11-15  
**API Well Number:** 43013503690000  
**Lease Number:** ML-51638  
**Surface Owner:** STATE  
**Approval Date:** 6/29/2010

**Issued to:**

XTO ENERGY INC, 382 Road 3100, Aztec, NM 87410

**Authority:**

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of R649-3-2. The expected producing formation or pool is the DAKOTA Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

**Duration:**

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

**General:**

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

**Conditions of Approval:**

This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

Cement volumes for the 13 3/8" and 9 5/8" casing strings shall be determined from actual hole diameters in order to place cement from the pipe setting depths back to the surface.

**Additional Approvals:**

The operator is required to obtain approval from the Division of Oil, Gas and mining before

performing any of the following actions during the drilling of this well:

- Any changes to the approved drilling plan – contact Dustin Doucet
- Significant plug back of the well – contact Dustin Doucet
- Plug and abandonment of the well – contact Dustin Doucet

**Notification Requirements:**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well – contact Carol Daniels  
OR  
submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at <https://oilgas.ogm.utah.gov>
- 24 hours prior to testing blowout prevention equipment - contact Dan Jarvis
- 24 hours prior to cementing or testing casing – contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling program – contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well – contact Dan Jarvis

**Contact Information:**

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voicemail message if the person is not available to take the call):

- Carol Daniels 801-538-5284 - office
- Dustin Doucet 801-538-5281 - office  
801-733-0983 - after office hours
- Dan Jarvis 801-538-5338 - office  
801-231-8956 - after office hours

**Reporting Requirements:**

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) – due within 5 days of spudding the well
- Monthly Status Report (Form 9) – due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) – due prior to implementation
- Written Notice of Emergency Changes (Form 9) – due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) – due prior to implementation
- Report of Water Encountered (Form 7) – due within 30 days after completion
- Well Completion Report (Form 8) – due within 30 days after completion or plugging

**Approved By:**



Acting Associate Director, Oil & Gas



<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> ML-51638
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> XTO ENERGY INC		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>3. ADDRESS OF OPERATOR:</b> 382 Road 3100 , Aztec, NM, 87410		<b>8. WELL NAME and NUMBER:</b> BLC 11-02-11-15
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2031 FSL 1975 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NESW Section: 02 Township: 11.0S Range: 15.0E Meridian: S		<b>9. API NUMBER:</b> 43013503690000
<b>PHONE NUMBER:</b> 505 333-3159 Ext		<b>9. FIELD and POOL or WILDCAT:</b> UNDESIGNATED
<b>COUNTY:</b> DUCHESNE		<b>STATE:</b> UTAH
<b>11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA</b>		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 6/1/2012  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"> <input type="checkbox"/> ACIDIZE  <input type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION         </div> <div style="width: 33%;"> <input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input type="checkbox"/> OTHER         </div> <div style="width: 33%;"> <input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input checked="" type="checkbox"/> <b>APD EXTENSION</b>          OTHER: <span style="border: 1px solid black; display: inline-block; width: 100px; height: 15px;"></span> </div> </div>	
<b>12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.</b> XTO Energy hereby requests a one (1) year extension of the State APD for the referenced well.		
<b>Approved by the Utah Division of Oil, Gas and Mining</b>  <b>Date:</b> 06/06/2011 <b>By:</b>		
<b>NAME (PLEASE PRINT)</b> Krista Wilson		<b>PHONE NUMBER</b> 505 333-3647
<b>SIGNATURE</b> N/A		<b>TITLE</b> Permitting Tech
<b>DATE</b> 6/1/2011		



## The Utah Division of Oil, Gas, and Mining

- State of Utah  
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

### Request for Permit Extension Validation Well Number 43013503690000

**API:** 43013503690000

**Well Name:** BLC 11-02-11-15

**Location:** 2031 FSL 1975 FWL QTR NESW SEC 02 TWP 110S RNG 150E MER S

**Company Permit Issued to:** XTO ENERGY INC

**Date Original Permit Issued:** 6/29/2010

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- If located on private land, has the ownership changed, if so, has the surface agreement been updated? ☐ Yes ☒ No
- Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? ☐ Yes ☒ No
- Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? ☐ Yes ☒ No
- Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? ☐ Yes ☒ No
- Has the approved source of water for drilling changed? ☐ Yes ☒ No
- Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? ☐ Yes ☒ No
- Is bonding still in place, which covers this proposed well? ☒ Yes ☐ No

**Signature:** Krista Wilson

**Date:** 6/1/2011

**Title:** Permitting Tech **Representing:** XTO ENERGY INC

**RECEIVED** Jun. 01, 2011

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> ML-51638
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> XTO ENERGY INC		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>3. ADDRESS OF OPERATOR:</b> 382 Road 3100 , Aztec, NM, 87410		<b>8. WELL NAME and NUMBER:</b> BLC 11-02-11-15
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2031 FSL 1975 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NESW Section: 02 Township: 11.0S Range: 15.0E Meridian: S		<b>9. API NUMBER:</b> 43013503690000
<b>PHONE NUMBER:</b> 505 333-3145 Ext		<b>9. FIELD and POOL or WILDCAT:</b> UNDESIGNATED
<b>COUNTY:</b> DUCHESNE		<b>STATE:</b> UTAH

11.

CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: <b>4/30/2013</b>	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> DEEPEN <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> PLUG BACK <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> WILDCAT WELL DETERMINATION <input type="checkbox"/> OTHER
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:	<input checked="" type="checkbox"/> <b>APD EXTENSION</b> OTHER: <input style="width: 100px;" type="text"/>
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:	
<input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

XTO Energy requests a one (1) year extension of the State APD for the referenced well.

**Approved by the  
Utah Division of  
Oil, Gas and Mining**

**Date:** June 18, 2012

**By:**

<b>NAME (PLEASE PRINT)</b> Richard L. Redus	<b>PHONE NUMBER</b> 303 397-3712	<b>TITLE</b> Regulatory
<b>SIGNATURE</b> N/A	<b>DATE</b> 6/14/2012	





**The Utah Division of Oil, Gas, and Mining**

- State of Utah
- Department of Natural Resources

**Electronic Permitting System - Sundry Notices**

**Request for Permit Extension Validation Well Number 43013503690000**

**API:** 43013503690000

**Well Name:** BLC 11-02-11-15

**Location:** 2031 FSL 1975 FWL QTR NESW SEC 02 TWP 110S RNG 150E MER S

**Company Permit Issued to:** XTO ENERGY INC

**Date Original Permit Issued:** 6/29/2010

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- If located on private land, has the ownership changed, if so, has the surface agreement been updated? ☒ Yes ☐ No
- Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? ☐ Yes ☒ No
- Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? ☐ Yes ☒ No
- Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? ☐ Yes ☒ No
- Has the approved source of water for drilling changed? ☐ Yes ☒ No
- Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? ☐ Yes ☒ No
- Is bonding still in place, which covers this proposed well? ☒ Yes ☐ No

**Signature:** Richard L. Redus

**Date:** 6/14/2012

**Title:** Regulatory

**Representing:** XTO ENERGY INC



GARY R. HERBERT  
Governor

GREGORY S. BELL  
Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

September 12, 2013

XTO Energy Inc.  
382 Road 3100  
Aztec, NM 87410

Re: APD Rescinded – BLC 11-02-11-15, Sec. 2, T. 11S, R. 15E  
Duchesne County, Utah API No. 43-013-50369

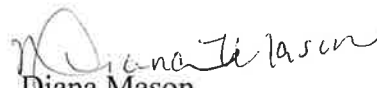
Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on June 29, 2010. On June 6, 2011 and June 18, 2012 the Division granted a one-year APD extension. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective September 12, 2013.

A new APD must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

  
Diana Mason  
Environmental Scientist

cc: Well File  
SITLA, Ed Bonner

